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Extract from Speech of Cardinal Gibbons at the Commencement Exercises, June 18, 1907.

"Christian schools, like Holy Cross College, are indispensable for the moral and mental development of the rising generation."

"The defences of our Commonwealth are not material, but spiritual. Her fortifications, her castles, are her institutions of learning. Those who are admitted to the college campus tread the ramparts of the State. The classic halls are the armories from which are furnished forth the knights in armor to defend and support our liberty. For such high purposes has Holy Cross been called into being. A firm foundation of the Commonwealth. A center of righteousness. A teacher of holy men. Let her priests continue to rise, showing forth the way, the truth, and the light.

*"In thoughts sublime that pierce the night like stars,
And with their mild persistence urge man's arch
To va. . . ssues."*

(Extract from the address of His Excellency, the Hon. Calvin Coolidge, delivered at the Commencement exercises, Holy Cross College, June 25, 1919.)

BULLETIN HOLY CROSS COLLEGE

EIGHTY-SEVENTH YEAR



Catalogue Number

WORCESTER, MASS.

PUBLISHED BY THE COLLEGE

JULY, 1930.

Corporate Title:

*"The Trustees of the College of the Holy Cross
in Worcester, Massachusetts."*

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Calendar for 1930-1931

*All holidays occurring within the academic year 1930-1931
are indicated by heavy type.*

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College Calendar

1930

- Wednesday, Sept. 3. Entrance Examinations.
- Thursday, Sept. 4. Entrance Examinations.
- Monday, Sept. 22. Registration, Sophomore and Freshman Classes.
- Tuesday, Sept. 23. Formal Opening of First Semester for Sophomore and Freshman Classes; Registration, Junior Class.
- Wednesday, Sept. 24. Formal Opening of First Semester for Junior Class; Registration, Senior Class.
- Thursday, Sept. 25. Formal Opening of First Semester for Senior Class.
- Monday, Sept. 29. First meeting of Sodalities.
- Wednesday, Oct. 1. First meeting of Debating Societies.
- Tuesday, Oct. 28. Annual Retreat.
- Saturday, Nov. 1. All Saints' Day; holy day.
- Tuesday, Nov. 11. Armistice Day; holiday.
- Wednesday, Nov. 19. Marks for First Quarter close.
- Saturday, Nov. 22. Reading of Quarterly Marks.
- Thursday, Nov. 27. Thanksgiving Day; holiday.
- Monday, Dec. 8. Feast of the Immaculate Conception; holy day.
- Saturday, Dec. 20. Christmas holidays begin.

1931

- Sunday, Jan. 4. Christmas holidays end for Freshman, Sophomore and Junior Classes.
- Monday, Jan. 5. Quarterly examination in English Composition. Quarterly examination in Junior Religion. Christmas holidays end for Senior Class.
- Tuesday, Jan. 6. Quarterly examination in Senior Religion.
- Tuesday, Jan. 20. Marks for the Second Quarter close.
- Wednesday, Jan. 21. Semester examinations in Mathematics 1, 2, 3 and 6 (9 to 11 A. M.); semester examinations in Mathematics 5 and 8 (1 to 3 P. M.)
- Thursday, Jan. 22. Semester examination in Religion (9 to 11 A. M.); semester examination in English Composition (1 to 3 P. M.).

- Friday, Jan. 23. Semester examinations in English 7, English 23, Economics 3, Economics 8, Education 9, Education 12, Geology and History 7 (1 to 3 p. m.).
- Saturday, Jan. 24. Semester examinations in Latin Composition, Physics 2, Physics 3, English 9 and English 14 (9 to 11 a. m.).
- Monday, Jan. 26. Semester examinations in Greek Composition and Biology 3 (9 to 11 a. m.); semester examinations in Biology 11, Biology 10, Economics 5, Economics 6, History 6, History 9, English 17, Education 13 and Education 14 (1 to 3 p. m.).
- Tuesday, Jan. 27. Semester examination in Latin Literature (9 to 11 a. m.); semester examinations in Education 11, Education 23, Sociology, Latin 13, Modern Language, Physics 4 and Physics 6 (1 to 3 p. m.).
- Wednesday, Jan. 28. Semester examination in Greek Literature (9 to 11 a. m.).
- Thursday, Jan. 29. Semester Examination in English Literature (9 to 11 a. m.).
- Friday, Jan. 30. Semester holidays begin.
- Tuesday, Feb. 3. Formal Opening of Second Semester.
- Wednesday, Feb. 18. Ash Wednesday.
- Sunday, Feb. 22. Washington's Birthday.
- Wednesday, Mar. 18. Marks for Third Quarter close.
- Saturday, Mar. 21. Reading of Quarterly marks; Announcement of subjects for prize essays.
- Wednesday, April 1. Easter holidays begin at 10:30 a. m.
- Monday, April 13. Easter holidays end for all classes.
- Sunday, April 19. Patriots' Day.
- Thursday, April 30. B. J. F. Prize Debate at 8 p. m.
- Wednesday, May 6. Elocution and Oratorical Contests at 8 p. m.
- Wednesday, May 13. Philomathic Prize Debate at 8 p. m.
- Thursday, May 14. Feast of the Ascension; holy day.
- Tuesday, May 19. Marks for Fourth Quarter close.
- Wednesday, May 20. Semester examinations in Economics 3, Economics 6, English 23, English 7, Education 9, Education 12, Astronomy and Sociology (1 to 3 p. m.).
Semester examination in English Composition (9 to 11 a. m.).

College Calendar

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- Thursday, May 21. Semester examinations in Religion (9 to 11 A. M.); Semester examinations in Latin 13, Greek 14, History 9, Physics 5 and Physics 7 (1 to 3 P. M.).
- Friday, May 22. Semester examinations in Mathematics 1, 2, 3 and 6, and Biology 2 (9 to 11 A. M.); semester examinations in Advanced Mechanics, Philosophy 15, Economics 5, Economics 8, Education 13, Education 24, Biology 12 and Biology 4 (1 to 3 P. M.).
- Saturday, May 23. Semester examinations in Latin Composition (9 to 11 A. M.).
- Monday, May 25. Semester examinations in English 18, Education 11, Education 14, and Modern Languages (1 to 3 P. M.).
- Saturday, May 30. Memorial Day; holiday.
- Monday, June 1. Senior Philosophy Oral examinations begin. Semester examinations in Greek Composition and Biology 3 (9 to 11 A. M.).
- Tuesday, June 2. Semester examination in Latin Literature (9 to 11 A. M.).
- Wednesday, June 3. Semester examinations in History 6 and History 7 (9 to 11 A. M.).
- Thursday, June 4. Semester examination in English Literature (9 to 11 A. M.).
- Friday, June 5. Semester examinations in Greek Literature, English 9, Physics 2, Physics 3 and English 14 (9 to 11 A. M.).
Junior Philosophy Oral examinations begin.
P.M. Oral examinations in languages begin.
- Thursday, June 11. Senior Retreat.
- Tuesday, June 16. Alumni Day.
- Wednesday, June 17. Commencement.

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REV. JOHN J. SMITH, S.J., DEAN

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REV. JAMES V. KELLY, S.J., CHAPLAIN

REV. CHARLES L. KIMBALL, S.J., FACULTY LIBRARIAN

FOSTER STEARNS, A.M., LIBRARIAN

PATRICK J. CARNEY, M.D., COLLEGE PHYSICIAN

MICHAEL F. FALLON, M.D., CONSULTING SURGEON

The Faculty

REV. JOHN M. FOX, S.J. <i>President</i>	Fenwick Hall
REV. MICHAEL J. AHERN, S.J. <i>Professor of Astronomy and Geology</i>	Weston College, Weston, Mass.
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J. EDWARD BOUVIER, A.M. <i>Director of Music</i>	22 Lenox St.
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PATRICK H. COLLINS, S.J. <i>Assistant Professor of Poetry</i>	Fenwick Hall
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IRVING T. McDONALD, A.B. <i>Assistant Professor of English; Dramatics</i>	105 Brookline St.
RAYMOND E. McDONALD, M.S. <i>Assistant Professor of Physics</i>	63 Marion St., Natick
BRENDAN F. McSHEEHY, M.S. <i>Instructor in Chemistry</i>	13 Prospect St., Whitinsville
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REV. JOHN J. MURPHY, S.J. <i>Assistant Professor of Philosophy</i>	Loyola Hall
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JAMES H. NESTOR, A.B. <i>Assistant Professor of Physics</i>	126 Vernon St.
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WILLIAM J. O'CONNELL, A.B. <i>Assistant in Office of Discipline</i>	145 Woodland St.
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FRANCIS X. POWERS, A.M. <i>Professor of Economics</i>	2 Chelsea St.
REV. BERNARD C. SHEA, S.J. <i>Assistant Professor of Philosophy</i>	Loyola Hall
LEO A. SHEA, S.J. <i>Assistant Professor of Greek</i>	Alumni Hall

Faculty

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REV. JOHN J. SMITH, S.J. <i>Dean of the College</i>	Fenwick Hall
REV. SIDNEY J. SMITH, S.J. <i>Professor of Rhetoric</i>	Alumni Hall
JOHN J. SPILLANE, A.M. <i>Assistant Dean of Discipline</i>	2 Agawam St.
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BARTHOLOMEW F. SULLIVAN <i>Instructor in Physical Education</i>	29 Hitchcock Rd.
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REV. JOHN D. WHEELER, S.J. <i>Dean of Discipline</i>	Fenwick Hall
JOHN M. YOUEL, M.S. <i>Instructor in Chemistry</i>	38 Benefit St.

Eighty-Seventh Year
COLLEGE OF THE HOLY CROSS
Worcester, Mass.

Conducted by the Fathers of the Society of Jesus

General Statement

HISTORICAL

The College of the Holy Cross was founded in the year 1843, by the Rt. Rev. Benedict Joseph Fenwick, second Bishop of Boston, and is the oldest Catholic College in New England. It had long been a cherished desire of Bishop Fenwick to establish in his diocese, which then included the City of Worcester, an institution for the higher education of Catholic young men. In bringing about the realization of this desire, he was aided by the Rev. James Fitton, who had, as early as 1838, established the Seminary of Mt. St. James on the hill which now bears that name, but was then known as Pakachoag, "Hill of Pleasant Springs." This institution, with its sixty acres of land, Father Fitton presented to the Bishop in 1843, and on this site the distinguished prelate determined to build his college. He gave it the name of his cathedral, with the motto and emblem of the Boston diocese—a cross in the heavens, as it appeared to the Emperor Constantine, with its historic legend.

The fact that the site was a gift was not the only consideration that influenced the Bishop in his selection. The healthfulness of the location and the natural beauty of the surrounding scenery were controlling motives. The spot, too, was considered at the time consecrated in local history. Near it the first

humble wigwam church of Worcester had been erected by John Elliot for his Indians in 1674. The Fathers of the Society of Jesus, who had long been established in Maryland, were invited to organize the courses of study according to the curricula of their college at Georgetown, in the District of Columbia, and to take entire charge of the teaching.

On the second day of November, 1843, classes were organized in what was then known as the "Seminary of Mt. St. James," and were there continued until January 13th, 1844, when the first college building was completed. The cornerstone of the latter was laid by Bishop Fenwick on June 21st, 1843. Speaking of this event, the *Catholic Expositor* of August, 1843, describes the purpose of the new institution as "the advancement of the arts, the cultivation of the sciences and the promotion of patriotism, morality, virtue and religion." The same publication describes the first building as a brick structure 104 feet in length and four stories in height "with a fine portico on the centre of the front." The first annual exhibition was held July 29th, 1844. The saintly Bishop Fenwick died August 10th, 1846, and was buried, in compliance with his own wish, in the college cemetery. He had always taken a deep interest in the success of the college, and a few days before his death, the 6th of August, he had ceded to the Fathers full control and possession of the institution, with the buildings and grounds, free of incumbrance.

On the afternoon of July 14th, 1852, eight days before the annual Commencement, a fire broke out, which destroyed the whole of the central building. This calamity not only suspended the class exercises, but threatened the very existence of the institution. The Rt. Rev. John B. Fitzpatrick, who was then Bishop of Boston, sympathized heartily with the Faculty, and determined that the college, which had been a monument to his predecessor's zeal for Christian education, should not perish. On the 3rd of October, 1853, the college, enlarged and remodeled, was again ready to receive students. The effect, however, of such a calamity on the young college is shown by the interruption in graduating classes from 1852 to 1858.

INCORPORATION

A class of the students, who had entered in 1843 and 1844, had advanced to "Philosophy," by which name the Senior year was then known, and were ready for graduation in 1849. The college, therefore, in that year applied to the Commonwealth of Massachusetts for the privilege of incorporation. The petition for a charter was presented in March, 1849, and was acted upon early in April. The petitioners were disappointed. The charter was not granted until the year 1865, when the sobering influence of the Civil War had caused all differences of opinion in regard to the college to be set aside.

If the students were disappointed in the hope of receiving their diplomas from their Alma Mater, they were not deprived of the benefits of graduation. Georgetown College in the District of Columbia, conferred the degrees on all who were graduated from 1849 to 1852 and from 1858 to 1865. How the Faculty and students bore their disappointment at this time may be judged from the testimony of His Excellency Governor Alexander H. Bullock, who said at the Commencement in 1868, alluding to the unsuccessful attempt to obtain a charter, that he had been deeply impressed by the manner in which the friends of the college hid all signs of disappointment and exhibited a patience which, under such circumstances, he would hardly have dared to expect from many Christian denominations.

It was during the Civil War, as intimated above, that the college, besides having become endeared to the Catholics of New England, had also attracted the favorable notice of many non-Catholics. The most distinguished among those who manifested an interest in the college at this period, was His Excellency the War Governor, John A. Andrew. He visited and examined the institution during the school term of 1862, and presided at the annual Commencement of that year. On the latter occasion, he spoke of the college in the highest terms, and the sincerity of his praise was unmistakable. He had taken pains to acquaint himself with the methods of teaching

employed at the college, and was qualified to bear testimony to their excellence. The impression made upon the Governor during these two visits secured his interest in behalf of a charter, and he more than once urged the Faculty to apply for it.

The interesting event of incorporation was not long delayed. A petition was presented to the Legislature in the session of 1865. A bill was framed to meet the exigencies of the case, read a third time in the House of Representatives on March 21st, and passed without opposition. The Senate confirmed the action of the lower body on March 23rd, and on the following day the Governor affixed his signature.

The charter granted to "The Trustees of the College of the Holy Cross, in Worcester, Massachusetts," with other privileges, the power "to confer such degrees as are conferred by any college in this Commonwealth, except medical degrees." This placed the college on an equality, before the Commonwealth, with all other institutions of a similar character. It was no little gratification to the Faculty that their earnest devotion to the cause of religion and education was acknowledged by the State, and it was a source of pride to the students to be able to receive from their Alma Mater, in her own words and over her own seal, the testimony of her approval.

It is gratefully recorded here that the college was particularly indebted to Hon. Alexander H. Bullock for many acts of courtesy. As a resident of Worcester, he had always taken a neighborly interest in the college, while speaker of the House he offered to present the petition for a charter, and while Governor of the State he presided at three successive Commencements. His example has been followed by most of the Governors of the Commonwealth since his time, particularly by Governor Ames, who founded a scholarship at the college, and Governor Curtis Guild, Jr., who attended five successive Commencements, at all of which he delivered memorable addresses, manifesting a cordial interest in the institution.

LOCATION

The seat of the college is on one of the highest of the eminences surrounding the City of Worcester. Towards the north, this "Hill of Pleasant Springs" commands an extensive and most delightful view of Worcester, at the time of the founding of the college a town of hardly 10,000 inhabitants; now a bustling city of more than 190,000, and, next to Boston, the largest city in Massachusetts. Over and beyond its many towers and spires and other elevations, looms aloft in the background, against the northern horizon, the summit of Mt. Wachusett, the second highest point in Massachusetts. The educational character of the environment is indicated by the prominent sites of Clark University, Worcester Polytechnic Institute, the State Normal School, Worcester Academy, and seven local High Schools, three of these under Catholic control. The view thus afforded of the busy city, with its succession of hills and intervening valleys, makes the location of Holy Cross College most charming and interesting. To this delightful prospect, exceptional advantages of pure air and perfect drainage are added by the high elevation, while the graceful terraces to the north and west of the college buildings furnish recreation grounds that are unsurpassed in every respect. Impartial visitors do not hesitate to declare that for healthfulness of location and for educational environment Holy Cross is exceptionally favored.

BUILDINGS

The old buildings, whose accommodations satisfied the student of a quarter of a century ago, have been enlarged and improved in many ways, and new buildings have been constructed in recent years.

FENWICK HALL

An improvement which at the time was considered of vast importance was the raising and extending of the east wing of the main building, Fenwick, in the spring of 1875. This wing, the only part of the building spared by the fire in 1852, gave

place in time to a structure one hundred and twelve feet long, with an east frontage of ninety feet. The first and second stories are used for the students' dining halls; while the Sodality chapel is on the third floor and occupies the space of two stories. Adjoining this wing, on the southeast corner, is the infirmary.

O'KANE BUILDING

A later and more modern extension, now known as "the O'Kane Building," was completed in the spring of 1895, and formally opened in September of the same year. In the basement is the students' recreational hall—most modern in every detail. The chemistry department is provided with all the necessary conveniences for work in general, analytical, organic and physical chemistry. The lecture-rooms and the six laboratories are specially designed and constructed for the purposes for which they are intended. The class-rooms, on the two floors above the recreational hall, are spacious and lightesome, and the corridors, long, wide and cheerful. The two floors above the class-rooms are reserved for the private rooms of students. The rooms are pleasantly situated, with east and west exposures and are equipped with all modern conveniences.

ALUMNI HALL

A more recent building is "Alumni Hall," which was opened in September, 1905. It contains nearly one hundred living rooms for students, with hot and cold baths. The lower floors also provide ample space for the enlarged Physics department, besides a new instrument room, museum, and laboratories. The Department of Physics occupies two floors in the northeast corner. The physics lecture-room, capable of seating over 90 students on elevated tiers of lecture chairs, is particularly well lighted and is equipped for projection work with the lantern. The lecture table is provided with the latest and most approved conveniences, including the alternating and direct current. The large apparatus-room, adjoining the lecture room, contains the requisite instruments for experiment and demonstration in

the various branches of physics. The laboratories on the floor below the lecture room, with a floor space of 2400 square feet, are capable of accommodating classes of fifty students in Physics and Mechanics. The apparatus is of the precision type and designed especially for quantitative work in mechanics, heat, light, sound and electricity. The building is entirely fireproof, provided with the most modern heating and ventilating equipment.

BEAVEN HALL

A late addition to the college buildings is "Beaven Hall," the generous gift of the late Right Reverend Thomas D. Beaven, D.D., and the clergy of the Springfield diocese. This new building was opened in September, 1913. Sixty-seven living rooms for students occupy the three upper floors, while the lower floor houses the Biology and Geology Departments. The building is entirely fireproof and equipped with the latest improvements for lighting, heating and ventilation.

LOYOLA HALL

In September, 1922, Loyola Hall, one of the most modern of college buildings, was opened to the Senior Class. The building, similar to Alumni Hall, is fireproof throughout. It contains nine class rooms on the two lower floors and one hundred living-rooms on the three upper floors.

MEMORIAL CHAPEL

At the eastern extremity of the campus, majestically overlooking the college dormitories, is St. Joseph's Chapel, a monument to Holy Cross men who paid the supreme sacrifice for their country.

DINAND LIBRARY

The Dinand Library, a monument to the intellectual history of Holy Cross College, was formally opened on Wednesday, November 2nd, 1927. The building occupies the space between O'Kane Hall and Beaven Hall, and has accommodations

for more than 350,000 volumes. On the upper floor of the building are found the offices of the Heads of several Departments.

STADIUM

The stadium, begun in the summer of 1924, is a horse-shoe-shaped structure built around the old concrete stands and opened on the west side of the field facing the baseball diamond. The stadium, when completed, will have a seating capacity of 35,000. At present it will accommodate about 18,000 persons.

THE COLLEGE YEAR

The College Year begins on the twenty-fifth of September and is continuous throughout two semesters of approximately eighteen weeks each. At the termination of each semester examinations are held, upon which rests the success or failure of the student in the work of the semester. Following the first semester is a brief vacation, at the end of which the second semester is formally begun.

EDUCATIONAL SYSTEM

The system of education is the one in use in all the colleges of the Society of Jesus, and is guided by the principles laid down in the famous *Ratio Studiorum*. This body of rules and suggestions has been elaborated by centuries of experience and has been judged worthy of attentive study and hearty approbation by the ablest scholars. One of its greatest advantages is that it secures, what is an essential requisite for success in educational work, natural, thorough, and effective methods of teaching, employed uniformly by all the teachers.

It is not a system of ever-changing theory and doubtful experiment, but one on which have been built the characters of the world's best scholars and statesmen for centuries. It meets the demand for modern improvements by wise adaptation and readjustment. Instead of abolishing prescribed studies and increasing elective courses, it advocates a wise, deliberate and

prudent election *by men whose profession is education*, not an unwise, sudden and rash choice by *inexperienced youth just entering on the process of education*.

The natural sciences and modern languages are by no means overlooked or neglected in this system, but the ancient languages and their literatures are still retained as prescribed studies, and, with mathematics and philosophy, form the "essential trinity of courses," which Prof. Ladd of Yale rightly considers "absolutely necessary for a truly liberal education."

The importance of the classics, even for those who intend to specialize in mathematics or the natural sciences, was emphasized by a man who stood at the head of the engineering profession, the late Dr. Charles F. Steinmetz, in these words: "It is my opinion that the neglect of the classics is one of the most serious mistakes of modern education and that the study of the classics is very important and valuable, and *more so in the education of the engineer* than in most other professions, for the reason that the avocation of an engineer is specially liable to make a man one-sided . . . It is true that the classics are not necessary if the aim is to fit a student to *ply the trade of engineer*, as that of plumber or boilermaker, but such learning of the engineering trade can hardly be called *receiving an education*, and certainly does not fit the man to perform intelligently his duties as citizen of the republic during the stormy times of industrial reorganization which are before us."

After the completion of such a course as is here given, the graduate is not sent to the theological seminary without any knowledge of the language in which the New Testament was written, or the methods of philosophical reflection and their bearing upon the problems of life and destiny. He is not sent to the medical school without some knowledge of physics and chemistry and some idea of the moral responsibility of the physician and surgeon. He is not sent to the law school without an intelligent grasp of the ethical nature and development of man and of the logical processes which make for and characterize sound judgment. He is not sent to the profession of teaching without some training for success in grasping truth

and imparting it to others, some more intimate knowledge of the responsibility of a teacher than he can get from a few vague talks on pedagogy, some more extensive knowledge of psychology than may be acquired by a brief course in "child study." On the contrary, he is sent out from his college so uniformly equipped and harmoniously developed in character that he is prepared to take up and prosecute any career, or even get more pleasure out of a life of leisure than a man who has missed such a preparation. Even as an equipment for a business career, such a preparation, as ex-President Low of Columbia testifies, "would make him a power in the business world beyond all his compeers who had not been so favored."

Finally, this system does *not* meet the demand of the multitude who are simply anxious to "get through college as soon as possible," but it does make profound thinkers, safe guiders, clear writers, logical pleaders and cultured gentlemen.

CLASS HOURS

The morning class hours are from 9.00 to 11.40, the afternoon hours from 12.20 to 3.00. Punctual attendance of students is so insisted on that late students are not admitted to class. Eighteen hours a week are given to lectures in the Senior year, twenty in Junior, twenty-one in Sophomore, and twenty-two in Freshman year.

SESSIONS AND HOLIDAYS

The year is divided into two terms: the first term from September to February, the second from February to the early part of June. Recesses are granted at Christmas and Easter: the former begins at noon on the twentieth of December and ends on the evening of the fourth of January; the latter begins at noon on Wednesday, April first, and ends on the evening of April thirteenth. The limits of these recesses cannot be extended without serious detriment to a student's class standing. Parents and guardians are therefore requested not to sanction or to ask for such extension. They are reminded, also, that ex-

ceptions made in favor of individuals are unfair to other students and injurious to discipline.

The ordinary holidays are as follows: holy days of obligation, state and national holidays, four days after the mid-year examinations and retreat holiday.

DISQUALIFICATION

Each student at the end of his respective year, must have acquired as credits necessary for graduation, the number of credits which that specific year offers as graduation credits. A student lacking in this number of credits is obliged to remove the deficiency before he can be considered a candidate for a degree.

CONDUCT OF STUDENTS

Students are expected to manifest both within and outside of the College the respect for order, morality, personal honor and the rights of others, that is required of good citizens. Failure to do this will necessitate withdrawal from the College. The College reserves the right to dismiss a student without any definite accusation.

STUDENT WELFARE

PHYSICAL TRAINING

While attending to the mental development of the student and safeguarding his moral character, the college authorities have not overlooked the importance of physical training. The student is provided with football and baseball fields, running track and tennis courts. Not only are physical instructors and experienced coaches and trainers provided, but all this is under the supervision and direction of a member of the faculty, who will see that the students do not become so engrossed in athletics that their studies may be neglected or their health suffer in any way.

With regard to all forms of college activities the policy of the

college authorities has always been that the student's first duty in college is attention to study, and that no other student activity should be allowed to interfere with this main purpose of college life.

MORAL TRAINING

One of the most important features in the system of Jesuit education is the formation and training of character. Hence a closer supervision is exercised over the students than is usual at the present day, in most of the large colleges; but an effort is made to exclude from this supervision every harsh feature. The professors live with the students, mingle with them constantly, interest themselves in their sports, direct their studies and in every way assume the relation rather of friends than of taskmasters. This constant, familiar, personal communication, on kindly terms, between professor and student, is a powerful factor in the formation of character. The age of the student is also considered, and in the later years of his college course a large degree of liberty is granted him. With regard to younger students the supervision is as close as any parent or guardian could reasonably expect. With regard to all, the enforcement of discipline, while mild and considerate, is unflinchingly firm, especially when there is question of the good of the student body or the reputation of the college.

As the greatest help in maintaining good discipline is found in the appeal to conscience and religion, special attention is paid to religious instruction. Christian doctrine is one of the prescribed studies in every class, supplemented by weekly lectures and conferences. The students are required to comply with their religious obligations regularly, and to make annually a spiritual retreat of three days. Sodalities and other Associations are also provided for the fostering of piety.

The consequence of the neglect or exclusion of such religious training of the heart, the conscience and the will, in preparation for the duties and struggles of life, was emphasized nearly a century ago by Daniel Webster. In his famous speech in the Girard case, he said: "It is a mockery and an insult to com-

mon sense to maintain that a school for the instruction of youth from which Christian instruction by Christian teachers is sedulously and religiously shut out is not deistic and infidel in its tendency."

PHYSICAL EXAMINATION

Each student is obliged to pass a physical examination before he will be allowed to begin class work. The College Medical Officer with his assistants will examine the students during the registration period.

MEDICAL CARE

The College Medical Officer, Dr. Carney, has direct supervision of all matters affecting the student body. All cases of illness, especially communicable diseases, should be promptly reported to him or his assistants. Dr. Carney, as College Physician, holds office hours daily in the College Infirmary.

DORMITORY ACCOMMODATIONS

In the College dormitories there are three hundred and thirty double rooms, nine suites, and one dormitory, affording accommodations for seven hundred and seventy-three students.

Distribution of rooms for Freshmen will be made according to the scholastic merits of candidates, determined from High School records and the Entrance Examinations.

Students registering at the College for the first time should upon receipt of notification of acceptance from the Committee on Admission, forward a fee of twenty-five dollars (\$25.00) in order to insure room space on the campus.

Admission to the College

ENTRANCE REQUIREMENTS FOR THE VARIOUS DEGREES

BACHELOR OF ARTS: Fifteen units as follows: four in Latin; two in Algebra; one in Plane Geometry; four in English; two in a Modern Language other than English; two in History (Ancient and either American or English).

BACHELOR OF PHILOSOPHY: Fifteen units as follows: four in English; two in Algebra; one in Plane Geometry; two in History; two in a Modern Language other than English; four in elective subjects, either listed or unlisted, provided that the unlisted subject is not a commercial or manual training subject.

BACHELOR OF SCIENCE: Fifteen units as follows: four in English; two in Algebra; one in Plane Geometry; one-half either in Solid Geometry or Plane Trigonometry; two in a Modern Language other than English; one in Science (Chemistry or Physics); four and one-half in elective subjects either listed or unlisted, provided that the unlisted subject is not a commercial subject.

ENTRANCE UNIT: A unit represents a year's study of any subject in a secondary school, constituting approximately a quarter of a full year's work. It is assumed that the length of the school year is at least thirty-eight weeks, that a period is at least forty-five minutes in duration, and that the study is pursued for at least five periods a week.

LISTED SUBJECTS

	<i>Units</i>		<i>Units</i>
English I (Grammar and Composition)	2	Intermediate French	1
English II (Literature)	2	Advanced French	1
Ancient History	1	Elementary German	2
American History	1	Intermediate German	1
English History	1	Advanced German	1
American History and Civil Government	1	Elementary Spanish	2
Civil Government	½	Intermediate Spanish	1
Latin (Elementary)	1	Advanced Spanish	1
Latin (Caesar)	1	Elementary Algebra	1
Latin (Cicero)	1	Intermediate Algebra	1
Latin (Virgil)	1	Plane Geometry	1
Greek (Elementary)	1	Solid Geometry	½
Greek (Xenophon's Anabasis)	1	Plane Trigonometry	½
Greek (Homer's Iliad)	1	Chemistry	1
Elementary French	2	Physics	1
		Biology	1
		Astronomy	1
		Physiography	1

UNLISTED SUBJECTS: All unlisted subjects offered as entrance credits must be subjects other than commercial and manual training subjects and must be recognized by the secondary school as credits towards graduation.

METHODS OF ADMISSION TO THE FRESHMAN CLASS

(PLAN A.)

Admission by Certificate

Certificates, admitting candidates without examination, will be accepted from secondary schools which have been approved by the Board of Admissions. (Cf. January issue for list of approved schools.) Secondary schools seeking this approval should secure from the Director of the Committee on Admissions the form necessary for making application for this privilege.

A candidate to be admitted without examination must have been graduated from a secondary school which has been approved by the College for the certificate privilege of admittance without examination; his scholarship standing for the last two

years of his course must place him in the highest quarter of his class; he must have satisfactorily completed the units required by the College for admission to the course for which he is applying.

Candidates seeking admission under this method should file their applications not later than August fifteenth of the year in which they propose to enter college. Application blanks may be secured from the Director of Admissions.

(PLAN B.)

Partial Certification

Candidates coming from an approved secondary school and failing to secure full certification may offer certified credits in one or more units required by the College for admission. Credit for the non-certified units may be obtained either by entrance examinations or by New York State Regents examinations with a grade of 75%. A candidate may take either the examinations conducted by the College or the examinations conducted by the College Entrance Board. Candidates seeking admission under this method should file their applications not later than August 1, 1931.

(PLAN C.)

Admission by Entrance Examinations.

All candidates not meeting the requirements outlined under either Plan A or Plan B must take entrance examinations in the units required by the College for admission. The candidates may take either the examinations conducted by the College or the examinations conducted by the College Entrance Board.

ENTRANCE EXAMINATIONS ARE CONDUCTED BY THE COLLEGE in June and September. All examinations, however, should be taken in June. Only in exceptional cases are candidates allowed to take the September examinations. Candidates making application for admission under this plan should file their applications on or before May 31, 1931.

THE COLLEGE ENTRANCE EXAMINATION BOARD will hold examinations on the 15th, 16th, 17th, 18th, 19th, 20th of June, 1931, at nearly 400 points in the United States and abroad.

A list of places at which examinations will be held will be published about March 1, 1931. Requests that the examinations be held at particular points should be transmitted to the Secretary of the College Entrance Examination Board not later than February 1, 1931.

Detailed definitions of the requirements in all examination subjects are given in a circular of information published annually about December 1. Upon request to the Secretary of the College Entrance Examination Board a single copy of this document will be sent to any teacher without charge. In general, there will be a charge of twenty-five cents, which may be remitted in postage.

All candidates wishing to take these examinations must make application by mail to the Secretary of the College Entrance Examination Board, 431 West 117th Street, New York City. Blank forms for this purpose will be mailed by the Secretary of the College Entrance Examination Board to any teacher or candidate upon request by mail.

The applications and fees of all candidates who wish to take the examinations in June, 1931, should reach the Secretary of the Board not later than the dates specified in the following schedule:

For examination centers—

In the United States east of the Mississippi River or on the Mississippi	May 25, 1931
In the United States west of the Mississippi River or in Canada	May 18, 1931
Outside of the United States and Canada, except in Asia	May 4, 1931
In China or elsewhere in the Orient	April 20, 1931

Every application for examination which reaches the Secretary of the Board on or before the scheduled date should be

accompanied by an examination fee of \$10.00, which may be remitted by postal order, express order, or draft on New York to the order of the College Entrance Examination Board.

An application which reaches the Secretary later than the scheduled date will be accepted only upon payment of \$5.00 in addition to the regular examination fee.

When a candidate has failed to obtain the required blank form of application the regular examination fee will be accepted if the fee arrive not later than the date specified above and if it be accompanied by a memorandum with the name and address of the candidate, the exact examination center selected, and a list of the subjects in which the candidate is to take the Board examinations.

Candidates who have failed to file applications for examination may be admitted by the supervisor to all examinations except the Scholastic Aptitude Test upon payment of a fee of \$5.00 in addition to the regular examination fee. Such candidates should present themselves at the beginning of the period of registration. They will receive from the supervisor blank forms of application which must be filled out and transmitted to the Secretary of the College Entrance Examination Board.

In order to exhibit their tickets of admission, to learn their examination numbers, and to obtain seats in the examination room, candidates should report for a morning examination at 8.45 and for an afternoon examination at 1.45. An examination will close for candidates admitted late at the same time as for other candidates. The examinations will be held in accordance with the time, Standard Time or Daylight Saving Time, observed in the local schools.

No candidate will be admitted to the Scholastic Aptitude Test late, that is, after 9.00 A. M.

THE SCHOLASTIC APTITUDE TEST, which will be held on the morning of Saturday, June 20, 1931, may be taken upon the completion of the school course or at the end of the third year of secondary school work. Each candidate desiring to take this test, even though he is to take no other examination, must

file with the Secretary of the College Entrance Examination Board the usual application for examination. Application blanks will be sent to any teacher or candidate upon request by mail to the Board. If the Scholastic Aptitude Test is taken in connection with the other examinations no additional fee is required; if taken alone the fee is \$10.00.

A week or more in advance of the Scholastic Aptitude Test each candidate who is to take the test will receive a booklet containing, with explanations and instructions, a specimen test, the blank spaces of which are to be filled in by the candidate. In order to secure admission to the test the candidate must present not only his ticket of admission, but also this booklet with the spaces filled in as requested. The supervisor will admit no candidate to the examination room without this booklet.

ADMISSION TO ADVANCED STANDING

A candidate seeking admission to advanced standing, unless coming from an approved institution of collegiate rank, will be examined in the studies required for entrance to Holy Cross College (unless admitted by certificate) and in those already pursued by the class which he desires to enter.

A candidate coming from an approved institution of collegiate rank may receive credit without examination for work done at that institution. He is obliged to present the same entrance credits as are required of students entering Holy Cross College without advanced standing, and is obliged to take all prescribed subjects in the course leading to the desired degree at Holy Cross College. The following credentials should be forwarded to the Registrar: a formal statement from the proper official of the institution previously attended, showing subjects accepted for entrance, subjects pursued at college, with their catalogue numbers.

SCHEDULE OF ENTRANCE EXAMINATIONS, JUNE, 1931

JUNE 3, 1931

Mathematics I (Elementary Algebra)	9.30 A. M.-11.30 A. M.
Mathematics II (Intermediate Algebra)	9.30 A. M.-11.30 A. M.
Mathematics III (Plane Geometry)	9.30 A. M.-11.30 A. M.
Mathematics IV (Solid Geometry)	9.30 A. M.-11.30 A. M.
Mathematics V (Plane Trigonometry)	9.30 A. M.-11.30 A. M.
Mathematics VI (Algebra and Plane Geometry)	9.30 A. M.-12.30 P. M.
Mathematics VII (Algebra, Plane Geometry and Plane Trigonometry)	9.30 A. M.-12.30 P. M.
French II (Elementary)	2.00 P. M.- 5.00 P. M.
French III (Intermediate)	2.00 P. M.- 5.00 P. M.
German II (Elementary)	2.00 P. M.- 5.00 P. M.
German III (Intermediate)	2.00 P. M.- 5.00 P. M.
Spanish II (Elementary)	2.00 P. M.- 5.00 P. M.
Spanish III (Intermediate)	2.00 P. M.- 5.00 P. M.
Greek II (Xenophon's Anabasis)	2.00 P. M.- 4.00 P. M.
Greek III (Homer's Iliad)	2.00 P. M.- 4.00 P. M.
Greek IV (Xenophon's Anabasis and Homer's Iliad)	2.00 P. M.- 5.00 P. M.

JUNE 4, 1931

Latin II (Caesar)	9.30 A. M.-11.30 A. M.
Latin III (Cicero)	9.30 A. M.-11.30 A. M.
Latin IV (Virgil)	9.30 A. M.-11.30 A. M.
Latin V (Caesar and Cicero)	9.30 A. M.-12.30 P. M.
Latin VI (Cicero and Virgil)	9.30 A. M.-12.30 P. M.
Chemistry	9.30 A. M.-12.30 P. M.
Biology	9.30 A. M.-12.30 P. M.
English I (Grammar and Composition)	2.00 P. M.- 4.00 P. M.
English II (Literature)	2.00 P. M.- 4.00 P. M.
English III (Grammar, Composition and Litera- ture)	2.00 P. M.- 5.00 P. M.

JUNE 5, 1931

Physics	9.30 A. M.-12.30 P. M.
Astronomy	9.30 A. M.-11.30 A. M.
Physiography	9.30 A. M.-11.30 A. M.
History I (Ancient History)	2.00 P. M.- 4.00 P. M.
History II (American History with Civil Gov- ernment)	2.00 P. M.- 5.00 P. M.
History III (American History)	2.00 P. M.- 4.00 P. M.
History IV (English History)	2.00 P. M.- 4.00 P. M.
History V (Modern European History)	2.00 P. M.- 4.00 P. M.

ADMISSION OF SPECIAL STUDENTS

Candidates who desire to pursue special subjects and who have had the requisite training may, with the approval of the Committee on Admissions, enter the various courses of study without becoming candidates for degrees.

Applicants must present to the Director of Admissions, before September first of the year in which they intend to enter, a certified statement of the nature and extent of their preparatory work and also testimonials of character and ability. Applicants must either pass entrance examinations or present certificates qualifying them to pursue the courses desired.

Special students are subject to the same regulations regarding attendance, examinations and discipline as candidates for degrees. Special students will be obliged to take at least fifteen hours per week unless a smaller assignment is allowed.

FEES

Candidates applying for admission to the College under Plan A are required to forward a matriculation fee of ten dollars with their application. (*Applications without the matriculation fee will receive no consideration.*) Matriculation fees will not be refunded unless application is refused by the Board of Admissions. Make check or money order payable to Treasurer, Holy Cross College.

Candidates applying for admission to the College under Plans B and C are required to forward with their application matriculation fee of ten dollars. (*Applications without the matriculation fee will receive no consideration.*) Matriculation fees will not be refunded unless application is refused by the Board of Admissions. In addition to the matriculation fee, a charge of ten dollars is made each candidate, for the privilege of taking entrance examinations. This fee should be forwarded upon the receipt of formal notification of the accept-

ance of application for entrance examinations. Make check or money order payable to Treasurer, Holy Cross College.

Candidates, upon receipt of notification of the acceptance of their applications, are obliged to forward a guarantee fee of twenty-five dollars, (\$25.00). This fee insures for a candidate a room on the campus and is credited on the candidate's first semester bill.

Entrance Requirements

DEFINITION OF ENTRANCE REQUIREMENTS

ENGLISH. *Four Units.* Preparation in English should fulfill these two objects: (1) the command of correct English, spoken and written; (2) accurate, intelligent and appreciative reading.

Grammar and Composition: A general review of the English grammar, emphasizing spelling and grammatical accuracy; principles of punctuation, sentences, paragraphing and the whole composition with special emphasis given to the principles of narration, description and exposition; written compositions comprising letter writing, descriptions, narrations and expository essays.

Literature: The aim in the course in Literature should be the training of the student in careful, intelligent and appreciative reading in considerable amount.

A. BOOKS FOR STUDY. (From each group one selection is to be made.)

Group I. Shakespeare: Hamlet, Julius Caesar, Macbeth.

Group II. Coleridge: The Ancient Mariner; Tennyson: Idylls of the King; Scott: The Lady of the Lake; Milton: Il Penseroso, L'Allegro, Lycidas.

Group III. Irving: The Sketch Book; Addison and Steele: Sir Roger de Coverly Papers; Macaulay: Life of Johnson; Carlyle: Essay on Burns.

Group IV. Washington: Farewell Address; Webster: First Bunker Hill Oration; Burke: Speech on Conciliation with America, Bristol Speech.

B. BOOKS FOR READING. (From each group two selections are to be made.)

Group I. Dickens: David Copperfield, Oliver Twist, The Tale of Two Cities; Scott: Ivanhoe, Quentin Durward; Hawthorne: The House of Seven Gables; Stevenson:

Treasure Island, Kidnapped; George Eliot: Silas Marner; Parkman: Oregon Trail.

Group II. Shakespeare: King Lear, King Henry V, As You Like It, The Tempest, Merchant of Venice.

Group III. Keats, Wordsworth, Shelley: Selections; Bryant: Thanatopsis; Milton: Paradise Lost; Longfellow: Tales of a Wayside Inn.

Group IV. The New Testament; Macaulay: Lord Clive; Franklin: Autobiography.

FRENCH. ELEMENTARY. *Two units.* The work in Elementary French should comprise a careful drill in pronunciation; memorizing of colloquial expressions; the rudiments of the grammar, including the inflection of the regular and irregular verbs, the inflection of adjectives, participles and pronouns, and plural nouns; word order; the reading of about 100 pages of an elementary reader, with daily practice in the translation of English prose into French.

FRENCH. INTERMEDIATE. *One unit.* The work in Intermediate French should comprise the reading of French literature; the taking of dictation in French; the translation into French of continuous English prose; a thorough drill in the rudiments of the grammar, with particular attention given to sentence construction, forms, pronouns, pronominal adjectives and all irregular verb forms.

FRENCH. ADVANCED. *One unit.* The course in Advanced French should comprise the reading of difficult prose and verse; class conversation in French; translation of English prose and verse into French; a thorough review of the rudiments of the grammar.

GERMAN. ELEMENTARY. *Two units.* The work in Elementary German should comprise a careful drill in pronunciation; memorizing of colloquial expressions; the rudiments of the grammar, including the inflections of the articles, of nouns, of adjectives, of pronouns, and of the weak and more usual strong verbs; the uses of the more common prepositions; the uses of

the modal auxiliaries; rules of syntax and word order; the reading of German prose authors; the translation of English prose into German.

GERMAN. INTERMEDIATE. *One unit.* The work in Intermediate German should comprise the intelligent reading of German Literature; the taking of dictation in German; the translation of continuous English prose into German; a thorough drill in the rudiments of the grammar, with particular attention given to the strong verbs, the use of the articles, cases, auxiliaries of all kinds, tenses and moods.

GERMAN. ADVANCED. *One unit.* The work in Advanced German should comprise the intelligent reading of German prose and verse; class room conversation; translation into German of English prose and verse; a thorough review of the rudiments of the grammar.

SPANISH. ELEMENTARY. *Two units.* The work in Elementary Spanish should comprise a careful drill in pronunciation; the memorizing of colloquial expressions; the rudiments of the grammar, including the conjugations of regular and irregular verbs, the inflections of nouns, adjectives and pronouns; the elementary rules of syntax; the reading of Spanish prose authors; and the practice of writing English prose into Spanish.

SPANISH. INTERMEDIATE. *One unit.* The work in Intermediate Spanish should comprise the intelligent reading of Spanish literature; the taking of dictation in Spanish; the translation into Spanish of continuous English prose; a thorough drill in the rudiments of the grammar, with particular attention given to sentence structure, forms and uses of pronouns, pronominal adjectives and irregular verbs.

SPANISH. ADVANCED. *One unit.* The work in Advanced Spanish should comprise the intelligent reading of Spanish literature; class room conversation; translation of English prose and verse into Spanish; a thorough review of the rudiments of the grammar.

MATHEMATICS. ELEMENTARY ALGEBRA. *One unit.* The work in Elementary Algebra should include the following requirements: the four fundamental operations for rational algebraic expressions; factoring; the determination of the highest common factor and the lowest common multiple by factoring; fractions, ratio and proportion; linear equations; radicals; quadratic equations.

INTERMEDIATE ALGEBRA. *One unit.* The following requirements should be studied in the course in Intermediate Algebra: quadratic equations; the application of the factor theorem; factoring of bi-nomial expressions ($v-a$); arithmetic and geometric progression; solution of equations containing radicals; graphical determination of the roots of an equation; logarithms,

including the formulas $\log ab$, $\log \frac{a}{b}$, $\log a^p$, and $\log a$.

PLANE GEOMETRY. *One unit.* The course in Plane Geometry should include a thorough drill in the usual theorems and constructions as treated in standard text-books; the application of these theorems in the measurements of angles, similar polygons, areas, regular polygons, and circles; the solution of numerous original problems.

SOLID GEOMETRY. *One-half unit.* The course in Solid Geometry should include a thorough study of the usual theorems and constructions as treated in standard text-books, including the relation of planes and lines in space, the properties and measurements of prisms, cylinders, and cones, the sphere and spherical triangle, and the various formulas for areas and volumes; the practical application of the formulas in the solution of original problems.

PLANE TRIGONOMETRY. *One-half unit.* The course in Plane Trigonometry should include the definitions and relations of the six trigonometric functions as ratios; circular measurements of angles; the proof and application of the principal formulas; the theory and use of logarithms.

LATIN. *Four units.* A candidate to qualify for admission to the Bachelor of Arts course is obliged to offer as credit the full Latin requirements.

LATIN. ELEMENTARY. *One unit.* The work in elementary Latin should comprise a thorough drill in the elementary rudiments of the grammar, including the inflection of nouns, adjectives and pronouns; a thorough study of the verb; elementary syntactical constructions of nouns and clauses, including purpose, result, and concessive; direct and indirect questions. The composition work should be so designed as to bring into practice correct word order, sequence of tenses, and the Latin constructions for purpose, result, and concessive clauses, direct and indirect questions.

LATIN. CAESAR, DE BELLO GALLICO, BOOKS I, II, III, IV. *One unit.* The reading in Casear should be not less than the first four books of the Gallic War. The reading should be supplemented by a thorough drill in the principal syntactical constructions, including the construction of indirect discourse, of dependent clauses both in direct and indirect discourse, and the conditional sentences. The work in composition should be so designed as to bring into practice the Latin constructions for indirect discourse and conditional sentences.

LATIN. CICERO, ORATIONS AGAINST CATILINE, I, III; MANILIAN LAW; ARCHIAS. *One unit.* The reading in Cicero should be not less than the first and third orations against Catiline, the Manilian Law, and the oration in behalf of Archias. In the reading of these orations, the candidate should make rhetorical outlines of each oration. Work in grammar should be stressed, especially the syntax of nouns, dependent clauses and conditional sentences. The work in composition should be so designed as to familiarize the candidate with Ciceronian style.

LATIN. VIRGIL, AENEID, BOOKS I, II, III, IV, V, VI. *One unit.* The reading in Virgil should be not less than the first six books of the Aeneid. All poetical constructions should be thoroughly understood; allusions known; and the candidate able to appreciate intelligently the Epic. The composition work

should be devoted to the application of the rules of prosody and verse structure; the scansion of the first four books; and the composition of Latin verse, especially the dactylic hexameter.

GREEK. *Three units.* For the perfect following of the literature course at the College, a thorough three years' training in Greek is absolutely necessary. The classes, however, are so arranged that students entering without this three-year course make up this deficiency during their Freshman and Sophomore years.

GREEK. *ELEMENTARY. One unit.* The work in Elementary Greek should comprise a thorough drill in all regular syntactical constructions; the inflections of nouns, adjectives and pronouns; the principal parts and conjugations of verbs; syntax of cases and the rules governing them; syntax of voices, moods and tenses of verbs. Elementary composition work should comprise the writing of simple English sentences into Greek, bringing into practice the Greek construction for the various cases of nouns, adjectives and pronouns. Special attention should be given to case endings, verb formations and moods.

GREEK. *XENOPHON'S ANABASIS, BOOKS I, II, III, IV. One unit.* The reading in Xenophon should be not less than the first four books of the Anabasis. The reading should be supplemented by a thorough drill on the syntax of moods, including the various constructions of the indicative, optative and subjunctive; a general study of dependent clauses and the corresponding Greek constructions. The work in composition should be so designed as to bring into practice the Greek constructions for independent clauses: clauses of purpose, result, cause and concession; temporal clauses introduced by *ὅτε* and *πρίν*; conditional sentences; and the attraction of moods.

GREEK. *HOMER'S ILIAD, BOOKS I, II, III, IV. One unit.* The reading in Homer should be not less than the first four books of the Iliad. In the reading of Homer, careful attention should be given to the Homeric dialect, the appreciation of the Epic, the explanation of the allusions and the metrical system. Work in the Attic grammar should be stressed, especially the more difficult syntactical constructions. The composition work

should be devoted to the scansion of the first two books and to review exercises in the translation of English prose into Greek, bringing into practice the Greek constructions for indirect discourse, the infinitive not of indirect discourse and all dependent clauses.

HISTORY. ANCIENT HISTORY. *One unit.* The work covered in Ancient History should include the study of Greek History to the death of Alexander the Great and the dissolving of his empire; Roman History; and early Medieval History to the death of Charlemagne.

AMERICAN HISTORY. *One unit.* The course in American History should include the study of American history from the reconstruction period through the modern period.

ENGLISH HISTORY. *One unit.* The course in English History should include a study of the history of England from the period of the conquest of the Island by Caesar in 55 B. C. through the Windsor line of Kings.

MODERN EUROPEAN HISTORY. *One unit.* The course in Modern European History should include the following requirements: reign of Louis XIV; colonial expansion and rivalries; development of the constitutional monarchy in England; Frederick the Great; the republican government of Revolutionary France; Napoleon; the main facts in the political development of Europe since 1815. The Industrial Revolution, the growth of nationalism and democracy and the economic expansion of the European possessions outside of Europe should receive special emphasis throughout the course.

CIVIL GOVERNMENT. *One-half unit.* A study of the civil government in the United States, including special treatises on the constitution, organization and actual working of national, state and local governments.

AMERICAN HISTORY AND CIVIL GOVERNMENT. *One unit.* This course should be so arranged that two-thirds of the time be devoted to the study of American History and one-third to the study of Civil Government.

CHEMISTRY. *One unit.* The course in Chemistry should comprise the study of a standard text-book, in order that the student may gain a thorough knowledge of the fundamental facts and laws of Chemistry; individual laboratory work, comprising at least thirty experiments; and lecture table demonstrations.

Outline of the requirements: the important physical and chemical properties and the preparation of the following elements and their most important compounds: oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, fluorine, sulphur, sodium, zinc, lead, and iron; the atmosphere; acids, bases and salts; Boyle's and Charles's Law; symbols and nomenclature; atomic theory; atomic weights and valence; solutions; ionization; electrolysis.

PHYSICS. *One unit.* The course in physics should comprise the study of a standard text-book in order that the candidate may gain a thorough knowledge of the fundamental facts and laws of Physics; individual laboratory work, comprising at least thirty experiments; and lecture table demonstrations, to familiarize the candidate with the facts and phenomena of Physics in their qualitative aspects and practical applications.

BIOLOGY. *One unit.* The course in Biology should comprise a careful study of the fundamental principles of Botany and Zoology. This course should include a year's study of a standard text-book, supplemented by individual laboratory work.

ASTRONOMY. *One unit.* The course in Astronomy should include instruction in the elementary principles of the science, including observation of the heavens with reference to the positions and movements of the heavenly bodies. A year's study of a standard text-book is required.

PHYSIOGRAPHY. *One unit.* The course in Physiography should be so designed that the candidate will gain a thorough knowledge of the essential principles of physical geography and of well-selected facts illustrating those principles. A year's study of a standard text-book, supplemented by individual laboratory work, is demanded as a requirement.

EXAMINATIONS IN REQUIREMENTS

MATHEMATICS I. A restricted examination in the fundamentals of Elementary Algebra, including all the requirements as outlined on page 41.

MATHEMATICS II. A restricted examination in Intermediate Algebra including all the requirements as outlined on page 41.

MATHEMATICS III. A restricted examination in the elements of Plane Geometry as outlined on page 41.

MATHEMATICS IV. A restricted examination in the elements of Solid Geometry as outlined on page 41.

MATHEMATICS V. A restricted examination in the elements of Plane Trigonometry as outlined on page 41.

MATHEMATICS VI. A comprehensive examination in Mathematics I, II and III.

MATHEMATICS VII. A comprehensive examination in Mathematics I, II, III and IV.

MATHEMATICS VIII. A comprehensive examination in Mathematics I, II, III and V.

FRENCH II. ELEMENTARY. This examination, covering the work as outlined under Elementary French, will be divided into two main parts.

Part I will test the candidate's knowledge of two years of study in the language. The questions asked will test the candidate's ability to translate French prose into English and his knowledge of syntactical constructions and inflections.

Part II of the examination will be devoted to the writing of French composition, including the writing of simple sentences and continuous prose.

FRENCH III. INTERMEDIATE. This examination, covering the work as outlined under Intermediate French will be divided into two main parts.

Part I will test the candidate's knowledge of three years of study in the language. The questions asked will test the candidate's ability to translate into idiomatic English, French literature, to appreciate intelligently the passages translated, and to be able to explain all syntactical constructions which appear in the passages to be translated.

Part II will be devoted to the writing of French composition, including the writing of continuous English prose in French.

GERMAN II. This examination, covering the work as outlined under Elementary German, will be divided into two main parts.

Part I of the examination will be a test of the candidate's knowledge of two years of study in the language. The questions asked will test the candidate's ability to translate German prose into English and his knowledge of the syntactical constructions and inflections.

Part II of the examination will be devoted to the writing of German composition, including simple sentences and continuous prose.

GERMAN III. INTERMEDIATE. This examination, covering the work as outlined under Intermediate German will be divided into two main parts.

Part I will test the candidate's knowledge of three years of study in the language. The questions asked will test the candidate's ability to translate German literature into English, to appreciate intelligently the passages translated and to be able to explain all syntactical constructions which appear in the passages to be translated.

Part II will be devoted to the writing of German composition, including the writing of continuous English prose in German.

SPANISH II. This examination, covering the work as outlined under Elementary Spanish, will be divided into two main parts.

Part I of the examination will be a test of the candidate's knowledge of two years of study in the language. The ques-

tions asked will test the candidate's ability to translate Spanish prose and his knowledge of the syntactical constructions and inflections.

Part II of the examination will be devoted to the writing of Spanish composition, including simple sentences and continuous prose.

SPANISH III. INTERMEDIATE. This examination covering the work as outlined under Intermediate Spanish, will be divided into two main parts.

Part I will test the candidate's ability to translate into idiomatic English Spanish Literature, to appreciate intelligently the passages to be translated and to be able to explain all syntactical constructions which appear in the passages to be translated.

Part II will be devoted to the writing of Spanish composition, including the writing of continuous English prose in Spanish.

HISTORY I. Ancient History.

HISTORY II. American History with Civil Government.

HISTORY III. American History.

HISTORY IV. English History.

HISTORY V. Modern European History.

ENGLISH I. An examination in the elements of English grammar and composition. The examinee may be asked to construe sentences, to parse words and to correct mistakes in usage. The test in composition will be devoted to the development of selected themes (one or more) throughout several paragraphs; applying the principles of paragraphing, of loose and periodic sentences, of description, narration and exposition. Several subjects will be suggested, from which the candidate may make his own selection.

ENGLISH II. This examination, covering the work as outlined under Books for Study and Books for Reading, will be divided into two main parts.

Part I of the examination will test the candidate's knowledge of those books required for study. The questions asked will test the candidate's knowledge of the content and form of the books, the lives of the authors and the literary periods to which the authors belong.

Part II of the examination will test the candidate's ability to appreciate intelligently one or two books selected from the group of books required for reading.

ENGLISH III. A comprehensive examination in English I and English II combined. The questions asked will be similar in form to those of the restricted examinations.

LATIN II. A restricted examination in the First and Fourth Books of Caesar's *De Bello Gallico*. The candidate will be asked to translate into English selected passages taken from the above required books, and to state and explain cases of nouns and pronouns, moods and tenses of verbs, which appear in the selected passages. The candidate may also be asked to decline nouns, to write the principal parts, conjugations and synopses of verbs and to explain historical references. The composition work will be based on Book I, *De Bello Gallico*, bringing into practice the rules for the sequences of tenses, the uses of the dative and ablative cases, and the Latin constructions for indirect discourse and conditional sentences.

LATIN III. A restricted examination in the First and Third Orations of Cicero against Catiline, and the Oration for Archias. The candidate will be asked to translate into English selected passages taken from the above required Orations and to state and explain cases of nouns, moods and tenses of verbs, to explain historical references and to outline the orations. The candidate may be asked to decline nouns, pronouns and adjectives, and to write the principal parts, conjugations and synopses of verbs. The composition work will be based on the First Oration against Catiline, bringing into practice Latin constructions for dependent clauses and conditional sentences.

LATIN IV. A restricted examination in the First, Third and Sixth Books of Virgil's *Aeneid*. The candidate will be asked

to translate into English selected passages taken from the above required books of the Aeneid, to explain poetic constructions, to appreciate intelligently the selected passages, to explain allusions, and to scan selected verses. Syntax of nouns and verbs may be asked. The candidate may be held responsible for all rules of prosody.

LATIN V. A comprehensive examination in Latin II and Latin III combined. The questions asked will be similar in form to those of Latin II and Latin III examinations. The composition work will be based on Cicero's first oration against Catiline and will bring into practice the same Latin constructions as the compositions of Latin II and Latin III examinations. The candidate will be asked to translate into English a Latin selection taken from an author with whom he is not familiar.

LATIN VI. A comprehensive examination in Latin III and IV combined. The questions asked will be similar in form to those of Latin III and Latin IV examinations. The composition work will be based on Cicero's first oration against Catiline and will bring into practice the same Latin constructions as the composition of Latin III examination. The candidate may be asked to translate into English selections taken from Latin prose authors or poets with whom he is not familiar.

GREEK II. A restricted examination in the First and Second Books of Xenophon's Anabasis. The candidate will be asked to translate into English selected passages taken from the above required books of Xenophon's Anabasis: to state and explain the cases of nouns, adjectives and pronouns; moods, tenses, and voices of verbs, which appear in the selected passages. The candidate may also be asked to inflect nouns, adjectives, and pronouns; to compare adjectives and adverbs; to write the principal parts, conjugations, and synopses of verbs; and to explain historical references. The composition work will be based on Book I, Xenophon's Anabasis, bringing into practice the rules governing the various uses of the indicative, optative and sub-

junctive moods; the Greek construction for dependent clauses of purpose, result, cause, and concession, and temporal clauses introduced by *ὅτε* and *πρίν* and conditional sentences.

GREEK III. A restricted examination in the First and Third Books of Homer's Iliad. The candidate will be asked to translate into English selected passages taken from any of the above required books of Homer's Iliad, to explain syntactical constructions, to write the prose form of Homeric words, to explain allusions, to appreciate the selections and to scan selected verses. The candidate may be held responsible for all rules of prosody.

GREEK IV. A comprehensive examination, combining Greek II and Greek III examinations. The questions asked will be similar in form to those of Greek II and Greek III examinations. The composition work will be based on the first book of Xenophon's Anabasis and will bring into practice the same Greek constructions as the compositions of the restricted examinations. The candidate will be asked to translate into English selections from Greek prose writers and poets with whom he is not familiar.

CHEMISTRY. The examination in Chemistry will be a test of the candidate's knowledge of the most fundamental facts and laws of chemistry; his ability to explain the preparations of various elements; his power to distinguish and identify elements; and his ability to solve original problems based on the fundamental laws.

PHYSICS. The questions will be so designed as to test the candidate's knowledge of the fundamental facts and laws of Physics and the application of the laws in the solving of original problems.

BIOLOGY. A restricted examination in the fundamental principles of Botany and Zoology.

ASTRONOMY. A restricted examination in the elementary principles of Astronomy.

PHYSIOGRAPHY. A restricted examination in the essential principles of physical geography.

REGISTRATION

All candidates for admission to the Freshman class and all candidates for admission to the Sophomore class must report to the Registrar in Room 11, O'Kane Hall, on the Monday preceding the formal opening of the first semester (September 22, 1930) and fill out registration cards for the whole of the ensuing year. A receipt from the Treasurer for payment of first term bill must be presented to the Registrar. All students, entering the College for the first time, must present at or before the time of registration all credentials, requisite for admission.

All students entering the Junior class must report for enrollment on the Tuesday preceding the formal opening of the first semester (September 23, 1930).

All students entering the Senior class must report for enrollment on the Wednesday preceding the formal opening of the first semester (September 24, 1930).

Senior and Junior students will report to the Registrar in Room 11, O'Kane Hall on the appointed days and fill out enrollment cards for the whole of the ensuing year. A receipt from the Treasurer for the payment of the first term bill must be presented to the Registrar.

For failure to register at the appointed times a fee of five dollars will be charged.

In May, all undergraduates must obtain at the Registrar's office, registration blanks for elective courses. These blanks must be filled out with elective courses chosen for the whole of the ensuing year and returned not later than June first. For failure to comply with this rule a fee of five dollars will be charged.

Changes in elective courses will be allowed only with the approval of the Committee on Academic Standing. Requests for changes in September should be filed with the Registrar before September first. Requests for changes for the second semester should be filed before the beginning of the first semester examinations, unless requests are the results of failures, in which case they must be presented to the Registrar not later than five days after the beginning of the second semester. A fee of five dollars is charged for changes.

ATTENDANCE, STANDING AND EXAMINATIONS

ATTENDANCE. Each student is compelled to attend at least 85 per cent of the classes in which he is enrolled, including gymnasium and eclectic lectures on subjects intimately connected with class-room study, and all chapel exercises. Any student missing more than fifteen per cent of scheduled classes in any subject during a semester will forfeit credit in that subject.

STANDING. At the close of each scholastic quarter, a report is sent to the parent or guardian of each student, including a record of the student's discipline and his standing in each of his classes. Sixty per cent. is demanded for passing grade; eighty-five per cent. is considered honor grade.

EXAMINATIONS. At the end of each quarter, all classes are examined in their respective subjects. These examinations constitute forty per cent. of the quarter's mark.

At the end of each semester, examinations in the entire semester's work are held. A student who has not attained the passing grade of sixty per cent. in the semester's work in any subject (the semester's grade is calculated in the following manner: the class work for the semester counting sixty-six and two-thirds per cent. and the examinations counting thirty-three and one-third per cent. of the semester grade)—will lose credit for that subject and consequently be conditioned.

Students, registered either in the Arts course or the Philosophy course, who carry conditions in ten or more credits or who carry conditions in two major subjects, will be dropped from the college; students, registered in the Science course, who carry conditions in nine or more credits or who carry conditions in two major subjects, will be dropped from the college.

All other conditioned students are given an opportunity to remove conditions by passing a comprehensive examination in the subjects in which they are conditioned. Failure in conditional examinations will necessitate repetition of the course. Students failing in more than two conditional examinations will be dropped from the college.

A fee of five dollars is charged for conditional examinations; a fee of three dollars is charged for the removal of an absent mark.

Requirements for Various Degrees

BACHELOR OF ARTS DEGREE: The requirement for graduation with Bachelor of Arts degree is 150 semester hours, the term "semester hour" signifying the satisfactory completion of work requiring attendance each half-year of one hour weekly in lectures or recitations or two hours weekly in laboratory.

Admission to all courses depends strictly upon the completion with grade of sixty per cent. or better of all prerequisites.

To be recommended for this degree, a student must have made at least thirty-two of the one hundred and fifty required semester hours in actual residence at Holy Cross College.

Unless the equivalents have been offered for admission, the following courses are prescribed for students who are candidates for the Bachelor of Arts degree.

English Composition and the study of Poetry. Four hours per week for two semesters.

Theory of Rhetoric and Rhetorical Analysis and Composition. Three hours per week for two semesters.

History of English Literature. One hour per week for two semesters.

Shakespearean Drama. One hour per week for two semesters.

Public Speaking. One hour per week for four semesters.

Latin. Including the four units offered for admission, six hours per week for four semesters.

Greek. Four hours per week for four semesters.

Mathematics. Including the entrance credits, Algebra, Plane Geometry, and Plane Trigonometry. Mathematics is not required in course; including only entrance credits in Algebra and Plane Geometry, two hours per week for two semesters.

Modern Language. Including the two units offered for admission, three hours per week for two semesters.

History. Including the two units offered for admission, three hours per week for four semesters.

Biology. One hour per week for two semesters for the Bachelor of Arts degree without pre-medical training; four hours per week (two

lecture hours and two laboratory hours) for four semesters for Bachelor of Arts degree with pre-medical training.

Chemistry. Three hours per week (two lecture hours and one laboratory hour) for two semesters for Bachelor of Arts degree without pre-medical training; for Bachelor of Arts degree with pre-medical training, thirty semester hours of credit are required.

Physics. Four hours per week (three lecture and one laboratory hour) for two semesters.

Philosophy. Nine hours per week for two semesters.

Psychology. Five hours per week for one and one-half semesters.

Natural Theology. Five hours per week for one-half semester.

Ethics. Five hours per week for two semesters.

Religion. Two hours per week for eight semesters.

Elective Branches. Six hours per week for four semesters.

BACHELOR OF PHILOSOPHY DEGREE: The requirement for graduation with the Bachelor of Philosophy degree is 140 semester hours, the term "semester hour" signifying the satisfactory completion of work requiring attendance each half-year of one hour weekly in lectures or recitation or two hours weekly in laboratory.

Admission to all courses depends upon the completion with grade of sixty per cent. or better of the stated prerequisites.

To be recommended for a degree, a student must have made at least thirty-two of the one hundred and forty required semester hours in actual attendance at Holy Cross College.

Two different courses are offered by the College, the satisfactory completion of either leads to this degree, the Bachelor of Philosophy course in Latin and the Bachelor of Philosophy course in English. Unless the equivalents of the respective requirements of each course have been offered for admission, the following courses are prescribed for students who are candidates for the Bachelor of Philosophy degree:

BACHELOR OF PHILOSOPHY—*In Latin*

English Composition and the study of Poetry. Four hours per week for two semesters.

Theory of Rhetoric and Rhetorical Analysis and Composition. Three hours per week for two semesters.

History of English Literature. One hour per week for two semesters.

Shakespearean Drama. One hour per week for two semesters.

Public Speaking. One hour per week for four semesters.

Latin. Including the four units offered for admission, six hours per week for four semesters.

Mathematics. Including the entrance credits, Algebra, Plane Geometry, and Plane Trigonometry. Mathematics is not required in course; including only entrance credits in Algebra and Plane Geometry, two hours per week for two semesters.

Modern Language. Including the two units offered for admission, three hours per week for two semesters.

History. Including the two units offered for admission, three hours per week for four semesters.

Biology. One hour per week for two semesters for the Bachelor of Philosophy degree without pre-medical training; four hours per week (two lecture hours and two laboratory hours) for four semesters for Bachelor of Philosophy degree with pre-medical training.

Chemistry. Three hours per week (two lecture hours and one laboratory hour) for two semesters for Bachelor of Philosophy degree without pre-medical training; for Bachelor of Philosophy degree with pre-medical training, thirty semester hours of credit are required.

Physics. Four hours per week (three lecture and one laboratory hour) for two semesters.

Philosophy. Nine hours per week for two semesters.

Psychology. Five hours per week for one and one-half semesters.

Natural Theology. Five hours per week for one-half semester.

Ethics. Five hours per week for two semesters.

Religion. Two hours per week for eight semesters.

Elective Branches. Six hours per week for four semesters.

BACHELOR OF PHILOSOPHY—*In English*

English Composition and General Rhetoric. Four hours per week for one semester.

English Composition and Poetry. Four hours per week for one semester.

History of English Literature. Four hours per week for two semesters.

English Literature of the Nineteenth Century. Three hours per week for two semesters.

Theory of Rhetoric and Rhetorical Analysis and Composition. Three hours per week for two semesters.

Shakespearean Drama. One hour per week for two semesters.

Public Speaking. One hour per week for two semesters.

Mathematics. Including the entrance units, three hours per week for two semesters.

Chemistry. Three hours per week (two lecture hours and one laboratory hour) for two semesters.

Physics. Four hours per week (three lecture hours and one laboratory hour) for two semesters.

Biology. Three hours per week (two lecture hours and one laboratory hour) for two semesters.

Modern Language. Including the two units offered for admission, three hours per week for four semesters.

Philosophy. Nine hours per week for two semesters.

Psychology. Five hours per week for one and one-half semesters.

Natural Theology. Five hours per week for one-half semester.

Ethics. Five hours per week for two semesters.

Religion. Two hours per week for eight semesters.

Elective Branches. Six hours per week for four semesters.

BACHELOR OF SCIENCE DEGREE: The requirement for graduation with the Bachelor of Science degree is 142 semester hours, the term "semester hour" signifying the satisfactory completion of work requiring attendance each half-year of one hour weekly in lectures or recitation or two hours weekly in laboratory.

Admission to all courses depends strictly upon the completion with grade of sixty per cent. or better of the stated prerequisites.

To be recommended for a degree, a student must have made at least thirty-two of the one hundred and forty-two required semester hours in actual attendance at Holy Cross College.

Four different courses are offered by the College, the satisfactory completion of any one of the four leads to this degree; namely, Bachelor of Science in Chemistry, Bachelor of Science in Physics, Bachelor of Science in Metallurgy and Bachelor of Science—General Course. Unless the equivalents of the respective requirements of each course have been offered for admission, the following courses are prescribed for students who are candidates for the Bachelor of Science degree:

BACHELOR OF SCIENCE—*In Chemistry*

English Composition and General Rhetoric. Three hours per week for one semester.

English Composition and Poetry. Three hours per week for one semester.

Theory of Rhetoric, Rhetorical Analysis and Composition. Three hours per week for two semesters.

Shakespearean Drama and History of English Literature. One hour per week for two semesters.

Public Speaking. One hour per week for two semesters.

Advanced Algebra. Four hours per week for one semester.

Plane Trigonometry. Four hours per week for one semester.

Mathematical Analysis. Four hours per week for two semesters.

Physics—*Mechanics, Heat and Sound*. Four hours per week for two semesters. *Light, Magnetism and Electricity*. Four hours per week for two semesters.

Chemistry—*Inorganic*. Five hours per week for two semesters. *Stoichiometry*. One hour per week for two semesters. *Qualitative Analysis*. Five hours per week for one semester. *Quantitative Analysis*. Five hours per week for one semester. *Organic Chemistry*. Five hours per week for two semesters. *Colloid Chemistry*. Three hours per week for two semesters. *Physical Chemistry*. Five hours per week for two semesters. *Qualitative Organic Analysis*. Three hours per week for one semester. *Ultimate Organic Analysis*. Three hours per week for one semester.

Philosophy. Nine hours per week for two semesters.

Psychology. Five hours per week for one and one-half semesters.

Natural Theology. Five hours per week for one-half semester.

Ethics. Five hours per week for two semesters.

German. Three hours per week for two semesters.

History. Two hours per week for two semesters.

Religion. Two hours per week for eight semesters.

BACHELOR OF SCIENCE—*In Physics*

English Composition and General Rhetoric. Three hours per week for one semester.

English Composition and Poetry. Three hours per week for one semester.

Theory of Rhetoric, Rhetorical Analysis and Composition. Three hours per week for two semesters.

Shakespearean Drama and History of English Literature. One hour per week for two semesters.

- Public Speaking. One hour per week for two semesters.
 Advanced Algebra. Four hours per week for one semester.
 Plane Trigonometry. Four hours per week for one semester.
 Calculus. Four hours per week for two semesters.
 Differential Equations. Three hours per week for two semesters.
 Mathematical Analysis. Four hours per week for two semesters.
 Chemistry—*Inorganic*. Five hours per week for two semesters.
Stoichiometry. One hour per week for two semesters. *Qualitative Analysis*. Five hours per week for one semester. *Quantitative Analysis*. Five hours per week for one semester.
 Physics—*Mechanics, Heat and Sound*. Four hours per week for two semesters. *Light, Magnetism and Electricity*. Four hours per week for two semesters. *Mechanics*. Four hours per week for one semester. *Optics*. Four hours per week for one semester. *Magnetism and Electricity*. Four hours per week for one semester. *Heat and Elementary Thermodynamics*. Four hours per week for one semester. *Applied Mechanics*. Four hours per week for four semesters.
 Mechanical Drawing. Two hours per week for two semesters.
 Descriptive Geometry. Two hours per week for two semesters.
 Philosophy. Nine hours per week for two semesters.
 Psychology. Five hours per week for one and one-half semesters.
 Natural Theology. Five hours per week for one-half semester.
 Ethics. Five hours per week for two semesters.
 German. Three hours per week for two semesters.
 History. Two hours per week for two semesters.
 Religion. Two hours per week for eight semesters.

BACHELOR OF SCIENCE—*In Metallurgy*

- English Composition and General Rhetoric. Three hours per week for one semester.
 English Composition and Poetry. Three hours per week for one semester.
 Theory of Rhetoric, Rhetorical Analysis and Composition. Three hours per week for two semesters.
 Shakespearean Drama and History of English Literature. One hour per week for two semesters.
 Public Speaking. One hour per week for two semesters.
 Advanced Algebra. Four hours per week for one semester.
 Plane Trigonometry. Four hours per week for one semester.
 Calculus. Four hours per week for two semesters.
 Differential equations. Three hours per week for two semesters.
 Mathematical Analysis. Four hours per week for two semesters.

Chemistry—*Inorganic*. Five hours per week for two semesters. *Qualitative Analysis*. Five hours per week for one semester. *Quantitative Chemistry*. Five hours per week for one semester. *Metallurgy of Iron and Steel*. Three hours per week for two semesters. *Non-ferrous Metallurgy*. Four hours per week for one semester. *Non-ferrous Metallography*. Four hours per week for one semester. *Metallography of Iron and Steel*. Four hours per week for one semester.

Physics—*Mechanics, Heat and Sound*. Four hours per week for two semesters. *Light, Magnetism and Electricity*. Four hours per week for two semesters. *Applied Mechanics*. Four hours per week for four semesters.

Mechanical Drawing. Two hours per week for four semesters.

Philosophy. Nine hours per week for two semesters.

Psychology. Five hours per week for one and one-half semesters.

Natural Theology. Five hours per week for one-half semester.

Ethics. Five hours per week for two semesters.

German. Three hours per week for two semesters.

History. Two hours per week for two semesters.

Religion. Two hours per week for eight semesters.

BACHELOR OF SCIENCE—*General Course*

English Composition and General Rhetoric. Three hours per week for one semester.

English Composition and Poetry. Three hours per week for one semester.

Theory of Rhetoric, Rhetorical Analysis and English Composition. Three hours per week for two semesters.

Shakespearean Drama and History of English Literature. One hour per week for two semesters.

Advanced Algebra. Four hours per week for one semester.

Plane Trigonometry. Four hours per week for one semester.

Physics—*Mechanics, Heat and Sound*. Four hours per week for two semesters. *Light, Magnetism and Electricity*. Four hours per week for two semesters.

Chemistry—*Inorganic*. Five hours per week for two semesters. *Stoichiometry*. One hour per week for two semesters. *Qualitative Analysis*. Five hours per week for one semester. *Quantitative Analysis*. Five hours per week for one semester. *Organic Chemistry*. Five hours per week for two semesters. *Physical Chemistry*. Three hours per week for two semesters. *Qualitative Organic Analysis*. Three hours per week for one semester. *Ultimate Organic Analysis*. Three hours per week for one semester.

Biology—*Botany*. Four hours per week for one semester. *Zoology*. Four hours per week for one semester. *Embryology*. Four hours per

week for one semester. *Vertebrate Anatomy*. Four hours per week for one semester. *Histological Technique*. Two hours per week for one semester.

Philosophy. Nine hours per week for two semesters.

Psychology. Five hours per week for one and one-half semesters.

Ethics. Five hours per week for two semesters.

Natural Theology. Five hours per week for one-half semester.

German. Three hours per week for two semesters.

History. Two hours per week for two semesters.

Religion. Two hours per week for eight semesters.

REQUIREMENTS FOR VARIOUS DEGREES ARRANGED BY YEARS

A.B. and Ph.B. Courses

FRESHMAN YEAR

A.B. COURSE
English 3, 4, 12
Latin 1, 2, 3,
¹Greek 1, 2 or 3, 4
or 5, 6
²Mathematics 1
³Modern Language
History 6
Religion 1, 2

**PH.B. COURSE
(Latin)**
English 3, 4, 12
Latin 1, 2, 3
²Mathematics 1
³Modern Language
History 6
Religion 1, 2

**PH.B. COURSE
(English)**
English 16, 2, 12
English 14
Mathematics 6
⁴Chemistry 1 or 2
French 3
History 6
Religion 1, 2

SOPHOMORE YEAR

English 5, 6
English 13
Latin 6, 11, 12
¹Greek 7, 8 or 9, 10
⁴Chemistry 1 or 2
History 7
Religion 3, 4

English 5, 6
English 13
Latin 6, 11, 12
⁴Chemistry 1 or 2
History 7
Religion 3, 4

English 5, 6
English 13
English 9
Biology 3
French 4
History 7
Religion 3, 4

JUNIOR YEAR

Philosophy 1, 2, 3, 4
Physics 1
⁵Physics 10
Biology 2
Religion 5, 6
^{*}Electives

Philosophy 1, 2, 3, 4
Physics 1
Biology 2
Religion 5, 6
^{*}Electives

Philosophy 1, 2, 3, 4
Physics 1
Religion 5, 6
^{*}Electives

SENIOR YEAR

Philosophy 5, 6, 7, 8
Philosophy 10, 11
⁵Physics 11
Religion 7
^{*}Electives

Philosophy 5, 6, 7, 8
Philosophy 10, 11
Religion 7
^{*}Electives

Philosophy 5, 6, 7, 8
Philosophy 10, 11
Religion 7
^{*}Electives

¹ Courses 1, 2, 7, 8 are obligatory for all students offering no Greek for admission.

² No college credit is given for Mathematics 1. The course is offered to allow students to remove entrance deficiency in Trigonometry.

³ The course in Modern Language depends upon the number of units offered for admission or the choice of the candidate.

⁴ Course 1 is obligatory for all students not pursuing pre-medical subjects; Course 2 is obligatory for all students pursuing pre-medical subjects.

⁵ Required of pre-medical students only.

^{*} Candidates for A.B. and Ph.B. degrees, desiring pre-medical training are required to choose as elective subjects Biology 4, 10, 11, 12 and Chemistry 13, 14 and 5. At the beginning of the Junior year, each candidate for a degree is obliged to select one elective branch and pursue that branch throughout the Senior year.

REQUIREMENTS FOR VARIOUS DEGREES ARRANGED BY YEARS

B.S. Courses

FRESHMAN YEAR

B.S. COURSE (<i>In Chemistry</i>)	B.S. COURSE (<i>In Physics</i>)	B.S. COURSE (<i>General</i>)	B.S. COURSE (<i>In Metallurgy</i>)
English 16, 2, 12	English 16, 2, 12	English 16, 2, 12	English 16, 2, 12
Mathematics 2	Mathematics 2	Mathematics 2	Mathematics 2
Physics 2	Physics 2	Physics 2	Physics 2
Chemistry 2	Chemistry 2	Chemistry 2	Chemistry 2
Chemistry 12	Chemistry 12	Chemistry 12	Chemistry 12
German 1	German 1	German 1	German 1
Religion 1, 2	Religion 1, 2	Religion 1, 2	Religion 1, 2

SOPHOMORE YEAR

English 5, 6	English 5, 6	English 5, 6	English 5, 6
Mathematics 3	Mathematics 3	Biology 11, 12	Mathematics 3
Physics 3	Physics 3	Physics 3	Chemistry 13
Chemistry 13	Chemistry 13	Chemistry 13, 14	Chemistry 14
Chemistry 14	Chemistry 14	History 7	Physics 3
History 7	History 7	Religion 3, 4	History 7
Religion 3, 4	Religion 3, 4		Religion 3, 4

JUNIOR YEAR

Philosophy 1, 2, 3, 4	Philosophy 1, 2, 3, 4	Philosophy 1, 2, 3, 4	Philosophy 1, 2, 3, 4
Chemistry 5	Mathematics 5	Biology 4, 6, 10	Mathematics 5
Chemistry 6	Physics 6, 7	Chemistry 5	Physics 12
Religion 5, 6	Physics 8, 9	Religion 5, 6	Physics 8
	Physics 12		Chemistry 11
	Religion 5, 6		Chemistry 103, 104
			Religion 5, 6

SENIOR YEAR

Philosophy 5, 6, 7, 8	Philosophy 5, 6, 7, 8	Philosophy 5, 6, 7, 8	Philosophy 5, 6, 7, 8
Philosophy 10, 11	Philosophy 10, 11	Philosophy 10, 11	Philosophy 10, 11
Chemistry 7	Physics 4, 5	Chemistry 7	Mathematics 8
Chemistry 8	Physics 13	Chemistry 8	Physics 13
Chemistry 9	Mathematics 8	Chemistry 9	Physics 8
Religion 7	Religion 7	Religion 7	Chemistry 105
			Chemistry 106
			Religion 7

Outline of Courses

BIOLOGY

Professor BUSAM

Assistant Professor MALUMPHY and Mr. McDERMOTT

Biology 1. General Biology. This course is a prerequisite to all future work in Biology. The cell is treated as the structural and physiological unit of the plant and animal life. The various manifestations of life are studied on selected types of the great groups of plants and animals. The study of these forms includes their anatomy, physiology, life histories, and relations to environment. Special attention is given in the lectures to the general biological problems: the relation of the organisms to each other, parasitism, organic evolution, and heredity.

Two lectures and two laboratory periods per week for two semesters.
Eight semester hours credit.

Texts: Lecture: *General and Professional Biology, Menge, Vol. I.*
Laboratory: *Manual for Gen. Biology, Giesen.*
Manual for Gen. Botany, Potter.

(Not offered 1929-1930)

Biology 2. Biological Principles. Required of all Juniors who have taken no other college work in Biology.

This course is intended for students of philosophy who are unable to take a laboratory course in Biology. It aims to give the biological background necessary for a proper understanding of many philosophical questions, especially in the field of psychology. The chief fundamental concepts of biology, tools used in biology, cell theory, reproduction, heredity, eugenics and evolution, vertebrate organization with particular emphasis on the nervous system, infection and immunity, are discussed. The lectures are illustrated by means of charts, lantern slides, and models.

One hour per week for two semesters.

Two semester hours credit.

Texts: *Backgrounds of Biology, Giesen and Malumphy.*

Professor BUSAM.

Biology 3. Animal Biology. Required of Sophomores in the Ph.B. (English) course.

This course aims to acquaint the student with the general anatomy and physiology of animal life. It begins with a consideration of the anatomy, histology and physiology of the frog. This is followed by a study of the protozoa, animal cell, nuclear and cell division in the plant as well as in the animal cell and the meiotic divisions. At this point special attention is given to the problems of heredity. Then follows a study of the rest of the evolutionary series of the invertebrates. The course is completed with a thorough consideration of the foetal pig.

Two lectures and one laboratory period per week for two semesters.

Six semester hours credit.

Texts: Lecture: *An Introduction to Zoology, O'Donoghue.*

Laboratory: *Laboratory Directions in General Zoology, Curtis and Guthrie.*

A Laboratory Manual of the Foetal Pig, Baumgartner.

Assistant Professor MALUMPHY and Mr. McDERMOTT.

Biology 4. Histology and Embryology. Required of Seniors in A.B. Pre-medical course; required of Juniors in the General B.S. course.

The histology includes a study of the fundamental tissues, i.e. epithelial, supporting, muscular, and nervous tissues, together with a detailed study of the organs of the mammalian body.

The Embryology begins with the study of the gametes, maturation, fertilization, segmentation and the formation of the three germ layers. This work is based on the development of the sea urchin, amphioxus and frog. This is followed by a study of the chick embryo from the time of incubation through the 96 hour stage. Both whole mounts and serial sections are used. An extensive collection of models and slides is at the disposal of the class.

Two lectures and two laboratory periods per week for one semester.

Four semester hours credit.

Texts: Lecture: *A Manual of Normal Histology and Organology, Hill.*

Embryology of the Chick, Patten.

Laboratory: *Professor's Notes.*

Professor BUSAM and Mr. McDERMOTT.

Biology 5. Vertebrate Anatomy. Open to Juniors in the B.S. course; required of Seniors in the A.B. Pre-medical course.

A thorough study in the laboratory of the skeletal systems of the shark,

alligator and cat. Detailed dissection of the muscular, circulatory, digestive, uro-genital, and nervous systems of the cat. Individual dissection by each student.

One lecture hour per week for one semester.

Two three-hour laboratory hours per week for one semester.

Four semester hours credit.

Text: *Anatomy of the Cat, Reighard and Jennings.*

(Not offered 1929-1930)

Biology 6. Histological and Embryological Technique. Open to Juniors in the General B.S. course and Seniors in the A.B. Pre-medical course.

The methods of killing and fixing, hardening, embedding, sectioning and mounting of tissues for microscopic study, are taken up. A certain number of well prepared microscopic slides are required of all students.

One laboratory period per week for one semester.

One semester hour credit.

Text: *Micrology, Guyer.*

Assistant Professor MALUMPHY.

Biology 10. Vertebrate Zoology. Required of Seniors in the A.B. Pre-medical course; required of Juniors in the General B.S. course.

This course is supplementary to Biology I and II. As an introduction a consideration of the lower vertebrates is made. Then the main work of the course is undertaken. This consists of a detailed study of the rabbit.

Two lectures and two laboratory periods per week for one semester.

Four semester hours credit.

Texts: Lecture: *Professor's Notes.*

Laboratory: *Professor's Notes.*

Professor BUSAM and Mr. McDERMOTT.

Biology 11. General Botany. Required of Juniors in the A.B. Pre-medical course; required of Sophomores in the General B.S. course.

This course aims to give a general view of the plant kingdom. In the beginning a study of the vegetative organs of the flowering plant is undertaken. This study includes a consideration of the gross and minute structures together with their various modifications and their physiology. Then follows a study of the plant cell, nuclear and cell division and the meiotic divisions. After this a complete evolutionary

series of the various phyla is perused. Then special studies are made of the reproductive organs of the flowering plant.

Two lectures and two laboratory periods per week for one semester.

Four semester hours credit.

Texts: Lecture: *A Textbook of General Botany, Smith et Al.*

Laboratory: *Laboratory Notes for Botany, Steil.*

Assistant Professor MALUMPHY and Mr. McDERMOTT.

Biology 12. Invertebrate Zoology. Required of Juniors in the A.B. Pre-medical course; required of Sophomores in the General B.S. course.

This course is intended to give a general survey of the invertebrates. As an introduction a relatively complex animal, the frog, is rapidly considered as regards structure and physiology. With this preparation begins the study of the protozoa. This is followed by a study of the animal cell, nuclear and cell division in the animal cell and the meiotic divisions. At this point a study of the laws of heredity is undertaken; the fruit fly serves as a specimen of exemplification. The rest of the evolutionary series of the invertebrates is then covered.

Two lectures and two laboratory periods per week for one semester.

Four semester hours credit.

Texts: Lecture: *College Zoology, Hegner.*

Laboratory: *Laboratory Directions in General Zoology, Curtis and Guthrie.*

Assistant Professor MALUMPHY and Mr. McDERMOTT.

CHEMISTRY

Professors STROHAVER, HAGGERTY and LANGGUTH

Associate Professors COONAN and KELLY

Assistant Professors BARIL and CHAREST

Mr. OELKE and ASSISTANTS

Chemistry 1. General Chemistry. This course is obligatory for all students of the A.B. and Ph.B. courses who are not fulfilling pre-medical requirements.

An elementary course in the fundamental principles of chemical science, together with a description of the more common elements (including Carbon) and their important compounds. The laboratory work is designed to illustrate those reactions which have found applications in the industries.

Two lecture hours and one laboratory hour per week for two semesters.

Six semester hours credit.

Texts: Lecture: *College Chemistry, Smith.*

Laboratory: *Professor's Outlines.*

Professor STROHAVER and FOUR ASSISTANTS.

Chemistry 2. General Inorganic Chemistry. This course is obligatory for all students of the B.S. course, and elective for students of the A.B. and Ph.B. courses. It must be elected by all students of the A.B. and Ph.B. courses who are fulfilling pre-medical requirements.

A thorough study of the physical and chemical properties of the elements and their more important compounds. Special emphasis is laid upon the relationships indicated by the periodic system and the electro-motive series. Effects which accompany change of valence, etc., are interpreted on the basis of the electronic theory.

Three lecture hours, one quiz, and two laboratory hours per week for two semesters.

Ten semester hours credit.

Texts: Lecture: *Inorganic Chemistry, Smith.*

Quiz: *Chemical Calculations, Meyer.*

Laboratory: *Experimental Inorganic Chemistry, Smith.*

MR. OELKE and THREE ASSISTANTS.

Chemistry 3. Analytical Chemistry. A course in qualitative and quantitative analysis. The qualitative course is intended to broaden the student's knowledge of Inorganic Chemistry from the viewpoint of pharmaceutical and medical application. Students are required to make selected tests from the United States Pharmacopoeia. The quantitative course is a study of the simpler methods of Volumetric and Gravimetric Analysis. Stress is laid on those methods which will be of use in the study of Physiological Chemistry.

Two lecture hours and two laboratory hours per week for two semesters.

Eight semester hours credit.

Texts: Qualitative: *Qualitative Chemical Analysis, Bradley.*

Quantitative: *Quantitative Analysis, Moody.*

(Not offered 1929-1930)

Chemistry 4. Analytic Chemistry. A course in qualitative and quantitative analysis. The qualitative course is designed to train the student in careful manipulation and exact methods of procedure. The reason for each operation is made clear to the student. The student is obliged

to apply to the operations of qualitative analysis the laws of chemical equilibrium, and especially the principles relating to solubility, and to the ionization, complex formation, and oxidation and reduction of substances in solution. The quantitative course consists of a general survey of the methods of volumetric and gravimetric analysis, including calorimetry, gas analysis, and electro-analysis. The theories applied in qualitative analysis are now studied quantitatively. Particular stress is laid on the theory and use of Indicators, Hydrogen-ion determination, and electrometric titration.

Two lecture hours and three laboratory hours for two semesters.

Ten semester hours credit.

Texts: Qualitative: *Qualitative Chemical Analysis*, A. A. Noyes.

Quantitative: *Quantitative Analysis*, Popoff.

(Not offered 1929-1930)

Chemistry 5. Organic Chemistry. Obligatory for Junior B.S. Elective for Senior A.B. and Junior Ph.B.

Three lecture hours and two laboratory hours per week for two semesters.

Ten semester hours credit.

Texts: Lecture: *Introduction to Organic Chemistry*, Williams.

Organic Chemistry, Bernthsen-Sudborough.

Laboratory: *Laboratory Book of Organic Chemistry*, Lowry-Baldwin.

Professor LANGGUTH and Assistant Professor BARIL.

Chemistry 6. Colloid Chemistry. Obligatory for Junior B.S. Elective for Senior A.B. and Junior Ph.B.

One lecture hour and two laboratory hours per week for two semesters.

Six semester hours credit.

Texts: Lecture: *Colloidal Chemistry*, Ware.

Laboratory: *Professor's Outlines*.

Associate Professor KELLY.

Chemistry 7. Physical Chemistry. Obligatory for Senior B.S. Elective for Senior Ph.B.

Three lecture hours and two laboratory hours per week for two semesters.

Ten semester hours credit.

Texts: Lecture: *Outlines of Theoretical Chemistry*, Getman.

Laboratory: *Laboratory Manual of Physical Chemistry*, Davidson and VanKlooster.

Professor HAGGERTY.

Chemistry 8. Qualitative Organic Analysis. Obligatory for Senior B.S. Elective for Senior Ph.B. .

One lecture hour and two laboratory hours per week for one semester.
Three semester hours credit.

Text: *Qualitative Organic Analysis, Kamm.*

Assistant Professor BARIL.

Chemistry 9. Ultimate Organic Analysis. Obligatory for Senior B.S. Elective for Senior Ph.B.

One lecture hour and two laboratory hours per week for one semester.
Three semester hours credit.

Texts: *Organic Combustions, Fisher, and Professor's Outlines.*

Assistant Professor BARIL.

Chemistry 10. Physiological Chemistry. Elective for all Seniors.
Two lecture hours and two laboratory hours per week for two semesters.

Eight semester hours credit.

Texts: Lecture: *Introduction to Physiological Chemistry, Bodansky.*

Laboratory: *Laboratory Manual of Physiological Chemistry, Bodansky and Fay.*

Professor STROHAVER.

Chemistry 11. Analysis of Ferrous and Non-Ferrous Alloys. Required of Junior B.S. students majoring in Metallurgy.

One lecture hour and two laboratory hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Outlines.*

Associate Professor COONAN.

Chemistry 12. Stoichiometry. Obligatory for students taking Chemistry 2.

One hour lecture (with assignment of problems) per week for two semesters.

Two semester hours credit.

Texts: First semester, *Elementary Chemical Calculations, Meyer.*

Second semester, *Oxidation-Reduction Reactions, Jette.*

MR. OELKE.

Chemistry 13. Qualitative Analysis. Obligatory for Sophomore B.S. Elective for Junior A.B. and Sophomore Ph.B.

Two lecture hours and three laboratory hours per week for one semester.

Five semester hours credit.

Text: *Qualitative Chemical Analysis*, A. A. Noyes.

Assistant Professor CHAREST.

Chemistry 14. Quantitative Analysis. Obligatory for Sophomore B.S. Elective for Junior A.B. and Sophomore Ph.B.

Two lecture hours and three laboratory hours per week for one semester.

Five semester hours credit.

Text: *Inorganic Quantitative Analysis*, Fales.

Assistant Professor CHAREST.

Chemistry 30. General Chemistry and Qualitative Analysis. Second Semester, Freshman Year: a study of the more important non-metals with their chief compounds supplemented by a systematic study of their respective properties through individual laboratory work.

First Semester, Sophomore Year: a study of the metals and their important compounds together with a systematic study of their properties through basic qualitative analysis as laboratory work.

Two lecture hours and one laboratory hour per week for two semesters.

Six semester hours credit.

Texts: *College Chemistry*, Newell.

Manual, Basic Analysis, Coyle.

(Discontinued September, 1925.)

Chemistry 31. Qualitative Analysis: Acid and Dry. The methods of Acid and Dry Analyses and the preparation of substances for analysis in solution.

One lecture hour and one and one-half laboratory hours per week for one semester.

Two and one-half semester hours credit.

Text: *Manual, Acid and Dry Analysis*, Coyle.

(Discontinued September, 1925.)

Chemistry 32. Qualitative Chemistry. The analysis of solutions, known and unknown, of salts, metals and alloys, together with the methods of acid and dry analyses and the preparation of substances for analysis in solution.

One lecture hour and one and one-half laboratory hours per week for two semesters.

Five semester hours credit.

Text: *Qualitative Chemistry*, Coyle.

(Discontinued September, 1920.)

Chemistry 33. Quantitative Chemistry. Lectures with laboratory practice in the use of typical methods of gravimetric and volumetric analysis.

One lecture hour and two laboratory hours per week for two semesters.

Six semester hours credit.

Text: *Quantitative Chemical Analysis*, Talbot.

(Discontinued September, 1925.)

Chemistry 101. Reaction Rates. Obligatory for M.S. students.

Three hours lecture and one hour of laboratory per week for one semester.

Four semester hours credit.

Professor HAGGERTY,

Chemistry 102. Electrochemistry. Elective for M.S. students.

Three lecture hours and two laboratory hours per week for one semester.

Five semester hours credit.

Professor HAGGERTY.

Chemistry 103. Non-ferrous Metallurgy. Elective for M.S. students.

Two lecture hours per week for one semester.

Two semester hours credit.

Associate Professor COONAN.

Chemistry 104. Metallurgy of Iron and Steel. Elective for M.S. Students.

Two lecture hours per week for one semester.

Two semester hours credit.

Associate Professor COONAN.

Chemistry 105. Non-ferrous Metallography. Elective for M.S. students.

Two lecture hours and two laboratory hours per week for one semester.

Four semester hours credit.

Associate Professor COONAN.

Chemistry 106. Metallography of Iron and Steel. Elective for M.S. students.

Two lecture hours and two laboratory hours per week for one semester.

Four semester hours credit.

Associate Professor COONAN.

Chemistry 107. Advanced Metallography. Elective for M.S. students.
Hours and credits arranged with the Professor.

Associate Professor COONAN.

Chemistry 108. Organic Reactions. Obligatory for M.S. students.
Two lecture hours and two laboratory hours per week for one semester.

Four semester hours credit.

Professor STROHAVER.

Chemistry 109. Organic Structure. Elective for M.S. students.

Two lecture hours and two laboratory hours per week for one semester.

Four semester hours credit.

Professor STROHAVER.

Chemistry 110. Selected Organic Topics. Elective.

Two lecture hours per week for one semester.

Two semester hours credit.

Professor STROHAVER.

Chemistry 111. Subatomic Structure. Elective.

Two lecture hours per week for one semester.

Two semester hours credit.

Professor HAGGERTY.

Chemistry 112. Seminar. Obligatory for M.S. students.

One hour every two weeks for two semesters.

Professor STROHAVER and FACULTY.

ENGLISH

Professors BOURSRY, DRUMM, EARLS, JOHN FLANAGAN, KIMBALL, MORIARTY, MULLIGAN, O'DRAIN and SMITH

Assistant Professors COLLINS, FINNEGAN, JOSEPH FLANAGAN, HALE, W. MURPHY, McCANN, H. McDONALD, I. McDONALD and TRIBBLE

English 1. Elementary Rhetoric and Composition. This course is obligatory for all students of the B.S. and Ph.B. courses. Prerequisite: four entrance units credit.

A thorough training in the fundamentals of literature and prose composition; choice of words, elegance, vigor and variety of expression; thought development; rhythm and movement of sentences; the finer points of style, correlation, economy and suggestion; laws governing narration, description and exposition.

Three hours per week for one semester.

Three semester hours credit.

Texts: *Model English I, II, III, Donnelly.*

Rhetoric and Composition, Hitchcock.

(Not offered in 1929-1930.)

English 2. Poetry and Versification. This course is obligatory for all students of the B.S. and Ph.B. (English) courses. Prerequisite: *English 1* or 16.

A thorough training in the general laws of versification with special emphasis on the sonnet, ode, and Spencerian stanza; distinctive features of poetic diction; the emotional and intellectual elements of poetry.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Study of Poetry, Connell.*

Nature of Poetry, Stedman.

Lycidas, Milton.

Golden Treasury, Palgrave.

Assistant Professors FINNEGAN and W. MURPHY.

English 3. Literature. This course is obligatory for all students of the A.B. and Ph.B. (Latin) courses. Prerequisite: four entrance units credit.

A thorough study of literature, its characteristic qualities, its position among the other fine arts; the four elements of literature—Emotion, Imagination, Thought and Form, a discussion of each element; divisions of literature.

A study of prose, its nature and province; the formal and informal essay; short story.

A study of poetry, its nature and province; distinctive features of poetic diction, emotional, imaginative and intellectual elements of poetry; Spenserian stanza; Sonnet; Epic; Lyric; and Dramatic Poetry.

Four hours per week for two semesters.

Eight semester hours credit.

Texts: Lecture: *Rhetoric and Composition, Hitchcock.*

Study of Poetry, Connell.

Aristotle's Theory of Poetry and Fine Arts, Butcher.

Reading: *Golden Treasury, Palgrave.*

Idea of a University, Newman.

Essay on Poetry, Watt.

Short Story, Selections.

Professors BOURSY, KIMBALL and Assistant Professors COLLINS, HALE, H. McDONALD, I. McDONALD and TRIBBLE

English 4. English Literature, History and Criticism. This course is obligatory for all students of the A.B. and Ph.B. (Latin) courses.

The Elizabethan Age to Pope (1603-1730); Lake School to Victorian Age.

One hour per week for two semesters.

Two semester hours credit.

Text: *History of English Literature, Brother Leo.*

Professors BOURSY, KIMBALL and Assistant Professors COLLINS, HALE, H. McDONALD, I. McDONALD and TRIBBLE

English 5. Precepts of Oratory. This course is obligatory for all students of the A.B., Ph.B., and B.S. courses. Prerequisite: *English 2 or 3.*

The theory of art and oratory; analysis and study of oratorical masterpieces; preparation of briefs and the composition of speeches.

Three hours per week for two semesters.

Six semester hours credit.

Texts: Lecture: *Oratorical Composition, Coppens.*

Notes on Oratory, Holy Cross Press.

Analysis: *Bristol Speech; Speech on Conciliation, Burke.*

Selections, Bradley.

Professors JOHN FLANAGAN, MORIARTY, MULLIGAN, O'DRAIN, SMITH and Assistant Professors JOSEPH FLANAGAN and McCANN

English 6. Shakespeare. Obligatory for all students of the A.B., Ph.B., and B.S. courses. Prerequisite: *English 2 or 3.*

A brief survey of the Drama before Shakespeare; Shakespeare as a poet and a playwright; reading of some of his plays; class study of the

tragedies, Macbeth or Hamlet; of the comedies, Merchant of Venice or the Twelfth Night.

One hour per week for two semesters.

Two semester hours credit.

Professors JOHN FLANAGAN, MORIARTY, MULLIGAN, O'DRAIN, SMITH
and *Assistant Professors* JOSEPH FLANAGAN and McCANN

English 7. English Literature of the Fifteenth and Sixteenth Centuries. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

This course comprises a literary appreciation and historical discussion of Epics, Romances, and Allegories of those centuries.

Edmund Spenser (1552-1599): The Faerie Queene; its thesis, its art, its value in national propaganda, its religious prejudices. For comparative study, Dryden's Hind and Panther; Bunyan's Pilgrims' Progress; Thompson's Hound of Heaven; Chesterton's Ballad of the White Horse, and his Lepanto.

The Arthurian Legends: Sir Thomas Malory (1400-1470). The early chroniclers of Arthur; the accretion in the legends; the later development.

For comparative reading: Roman de la Rose, Song of Roland; Irish epical tales.

Ariosto (1470-1533). The Orlando Furioso: its literary and historical sources, its art and purpose as estimated by Ariosto's contemporaries, its expression of philosophy of life, its contribution to the growth of continental literature.

Tasso (Torquato, 1544-1595). The Jerusalem Delivered: its epical structure and character in comparison with the Iliad and Aeneid; the Crusades as a quarry for literary material; neglect of these sources in English literature; courtly patronage of letters as in the careers of Ariosto and Tasso; the "Kingdom" in the exercises of St. Ignatius.

Camoens (1534-1579). The Lusiad: building a nation's literature, the significance of such an epic in national culture; the art in the structure of the Lusiad; the influence on literature of the geographical discoveries, as in the case of Vasco da Gama; the romance values in the apostolic career of St. Francis Xavier.

Spanish Versions of Amadis de Gaula (1508). Origins and growth of this romantic material; the various adaptations; its symbolism.

Cervantes (1547-1616). The Romance in prose; Don Quixote, a national book, curative satire.

The splendor of the Spanish dramatists: Lope de Vega (1562-1635); his Dragontea; his work along the lines of Ariosto and Tasso; his influence on the school of drama.

Calderon (1600-1681): his autos sacramentales; tributes to him in

English literature,—Shelley, Edward Fitzgerald, James Russell Lowell; his *Magico Prodigioso*; Denis Florence McCarthy's translations.

Oral discussions and written themes on material drawn from the above chapters; Composition (theory and practice):—the familiar essay, the publicist essay, the ancient and modern principles of style; reading of stylists, ancient and modern; criticism of the principles of both the classic and modern schools.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Outlines.*

Professor EARLS.

English 8. English Literature of the Eighteenth Century. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

The Neo-classicism of Pope; the rise of the periodical essay (Addison and Steele); miscellaneous prose; DeFoe, Swift; the rise of the English novel; Richardson, Fielding, Smollett, Sterne; Johnson and his circle: Boswell, Burke, Gibbon; the drama: Goldsmith, Sheridan; diarists and letter-writers: Burney, Montague, Walpole, Chesterfield; transition to naturalism and romance: Collins, Gray, Cowper, Crabbe, Blake, Burns. Outside reading in selected works of each author with frequent written reports.

Four hours per week for one semester.

Four semester hours credit.

Text: *Professor's Notes.*

Professor DRUMM.

English 9. English Literature of the Nineteenth Century. From the Lyrical Ballads to the Death of Scott. This course is required of students in the Ph.B. (English) course.

The general characteristics of the romantic movement: the Wordsworth group; Wordsworth, Coleridge, Southey, the narrative poetry of Scott and the historical novel; the essayists; Hazlitt, Lamb, Hunt, Landor, De Quincey; the Shelley group; Keats, Shelley, Byron. Outside reading in selected works of each author with frequent written reports.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Notes.*

Professor DRUMM.

English 10. Drama. One-Act Play. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

After a brief resumé of the drama, the major part of this course is spent in the study of the one-act play, its beginning, development, and

technique. Its fundamental principles are explained and illustrated from the more famous plays of this type.

(Not offered 1929-1930.)

English 11. Contemporary Drama. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses. Prerequisite: *English 10.*

This course aims to give a general outline of the more salient features of Contemporary Drama. Beginning with the latter part of the 19th Century, the authors and tendencies of modern drama are discussed, and the plays of the outstanding American and European authors read and analyzed.

(Not offered 1929-1930.)

English 12. Public Speaking. This course is obligatory for Freshmen in the A.B., Ph.B., and B.S. courses.

Principles of voice culture; vocal interpretation of literature; extempore speaking, debating.

One hour per week for two semesters.

Two semester hours credit.

Text: Lecture: *Professor's Notes.*

Assistant Professor McCANN.

English 13. Public Speaking. Advanced Course. This course is obligatory for Sophomores in the A.B. and Ph.B. courses.

Practice in extempore speaking and in the composition and delivery of the common forms of the occasional address; debating.

One hour per week for two semesters.

Two semester hours credit.

Text: Lecture: *Professor's Notes.*

Professor JOHN FLANAGAN.

English 14. History of English Literature. Obligatory for all students in the Ph.B. (English) course.

Four hours per week for two semesters.

Eight semester hours credit.

Text: *History of English Literature, Brother Leo.*

Assistant Professor FINNEGAN.

English 15. Mechanics of English. This course is obligatory for Sophomores in the Ph.B. (English) course and Freshmen in the A.B. and Ph.B. (Latin) courses.

A general review of all fundamentals of prose composition, such as:

grammar, choice of words and expressions, paragraph structure, types of themes, organization of material and presentation of ideas.

One hour per week for two semesters.

Two semester hours credit.

Text: *Mechanics of English, Geever and Jones.*

Instructor's Notes.

(Not offered 1929-1930.)

English 16. English Composition, Mechanics of English and General Rhetoric. This course is obligatory for Freshmen in the B.S. and Ph.B. (English) courses.

A general review of all fundamentals of prose composition; choice of words, elegance, vigor and variety of expression; thought development; rhythm and movement of sentences; the finer points of style, correlation, economy and suggestion; laws governing narration, description and exposition.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Model English I, II, III, Donnelly.*

Rhetoric and Composition, Hitchcock.

Mechanics of English, Geever and Jones.

Assistant Professors FINNEGAN and W. MURPHY.

English 17. The English Novel in the Nineteenth Century. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

Major novelists: Jane Austen, Scott, Dickens, Charles Reade, Thackeray, Charlotte Bronte, George Eliot, Charles Kingsley, R. L. Stevenson, George Meredith, Thomas Hardy.

Lesser novelists: Miss Edgeworth, Miss Ferrier, John Galt, Frederick Marryat, Bulwer Lytton, Disraeli, George Borrow, Wilkie Collins, Anthony Trollope, Elizabeth Gaskell, Emily Bronte, Richard Blackmore.

Four hours per week for one semester.

Four semester hours credit.

Text: *Professor's Notes.*

(To be offered 1930-1931.)

English 18. American Literature from 1870 to 1900. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

The Novel: Mark Twain, Dean Howells, Henry James, Stephen Crane. The Short Story: Bret Harte, G. W. Cable, Mrs. Freeman, Frank Stockton, Thomas Nelson Page, Jack London, O. Henry, Hamlin Garland. Poetry: Walt Whitman, Sidney Lanier, Emily Dickinson, Joaquin Miller, Bret Harte. The Drama: Clyde Fitch, Augustus

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Thomas, Bronson Howard, William V. Moody, Steele McKaye. The Essay: H. D. Thoreau, John Burroughs, John Muir, Lafcadio Hearn.

Four hours per week for one semester.

Four semester hours credit.

Text: *Professor's Notes*.

(To be offered 1930-1931)

English 19. English Literature of the Nineteenth Century From the Lyrical Ballads to the Death of Scott. This course is elective for Juniors and Seniors in the A.B. and Ph.B. (Latin) courses.

The general characteristics of the romantic movement: the Wordsworth group; Wordsworth, Coleridge, Southey; the narrative poetry of Scott and the historical novel; the essayists; Hazlitt, Lamb, Hunt, Landor, De Quincey; the Shelley group; Keats, Shelley, Byron. Outside reading in selected works of each author with frequent written reports.

Four hours per week for one semester.

Four semester hours credit.

Text: *Professor's Notes*.

(Not offered 1929-1930.)

English 20. Victorian Poetry and Prose (excepting the Novel). This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

Alfred Tennyson; Robert Browning; Elizabeth Barrett Browning; Matthew Arnold; The Pre-Raphaelite Group: D. G. Rossetti, Christina Rossetti, William Morris, A. C. Swinburne; Miscellaneous Poets: Arthur Hugh Clough, Coventry Patmore, Francis Thompson, Edward Fitzgerald, James Thomson. Prose: Thomas Carlyle, John Ruskin, Thomas Babington, Macaulay, John Henry Newman, Walter Pater.

Four hours per week for one semester.

Four semester hours credit.

Text: *Professor's Notes*.

Professor DRUMM.

English 21. Contemporary Literature. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

A comparative study of the modern writers in the various countries from 1900 to the present day.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Notes*.

(Not offered 1929-1930.)

English 22. Advanced English Composition. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

A brief review of the principles of English Composition; creative work along original lines; weekly composition.

One hour per week for two semesters.

Two semester hours credit.

Text: *Professor's Notes.*

(Not offered 1929-1930.)

English 23. Advanced English Composition. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

Foundations of literary style; creative work in the essay, review, editorial, short story and one-act play.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Notes.*

Assistant Professor I. McDONALD.

GREEK

Professors D'ANDRASSY, MICHAUD, NELLIGAN, O'BRIEN and O'DRAIN

Assistant Professors BIGGINS, JOSEPH FLANAGAN, SHEA and MR. CERVINI

Greek 1. Elementary Greek. This course is obligatory for all Freshmen in the A.B. course, entering the College without any secondary preparation in Greek.

Vowel, diphthong, and consonant observations; accent; declensions; conjugations; study of verbs, regular and irregular; formation of tenses.

The vocabulary of the student is naturally extended by simple sentences. The nominative-genitive inflection is recited, as is the comparison of adjectives and adverbs, and particularly in the same way the six principal parts of the verb given when met for the first time. The early use of an elementary dictionary is required. Correct letter formation of the Greek script is insured by systematic practice.

Four hours per week for one semester.

Four semester hours credit.

Texts: *An Introduction to Greek, Crosby and Schaeffer.*

Professor NELLIGAN and MR. CERVINI.

Greek 2. Elementary Greek. This course is a continuation of *Greek 1*, and is obligatory for Freshmen in the A.B. course without any secondary preparation in Greek.

Occasional review of *Greek 1* as needed; rules of syntax; selections from Xenophon's *Anabasis*, Books I-IV; St. Luke's Gospel; Selections from Lucian; the reading of selected monographs on Xenophon as given in standard encyclopoedias; a thorough study of the life and times of Xenophon as given in the introduction of the Harper and Wallace edition.

Four hours per week for one semester.

Four semester hours credit.

Texts: *An Introduction to Greek*, Crosby and Schaeffer.

Xenophon, Harper and Wallace.

Selections, Lucian.

Professor NELLIGAN and Mr. CERVINI.

Greek 3. Intermediate Greek. This course is obligatory for all Freshmen in the A.B. course, entering the College with only two years of preparation in Greek.

The reading of selected passages in the original from the first six books of the *Iliad*, together with a comprehensive knowledge of the entire epic based upon the Lang, Leaf, Myer edition. A comparative study of Chapman's Translations is made. Sight reading is based on the *Anabasis* of Xenophon.

Four hours per week for one semester.

Four semester hours credit.

Texts: *An Introduction to Greek*, Crosby and Schaeffer.

Homer's Iliad, Keep.

Translations, Chapman.

Xenophon, Harper and Wallace.

Professor D'ANDRASSY.

Greek 4. Intermediate Greek. This course is a continuation of *Greek 3* and is obligatory for all Freshmen in the A.B. course with only two years of preparation in Greek.

The reading of the Greek tragedy, *Hecuba*, together with a study of the Greek tragedy viewed in the light of the principles of dramatic poetry as exemplified in Connell's Text-book on Poetry. The *Apology* of Plato. References: Jebb, Browne, Murray, Moulton, Dyer, Flagg, Stock, Xenophon's *Memorabilia*.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Euripedes' Hecuba*, Bond and Walpole.

Plato's Apology, Jowett.

Text-book on Poetry, Connell.

Professor D'ANDRASSY.

Greek 5. Advanced Greek. This course is obligatory for all Freshmen in the A.B. course who offer three years of preparation in Greek for admission.

The reading of the *Odyssey* of Homer, together with a careful study of the introduction, and continuous reference to the notes and vocabulary. The study of Homer as an epic poet, comparison with the Latin, Italian and English epic poets.

The reading of Plato's *Apology*, with a careful study of the trial and death of Socrates.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Homer's Odyssey*, Goodwin.

Plato's Apology, Kitchel.

Professors NELLIGAN and O'BRIEN.

Greek 6. Advanced Greek. This course is a continuation of *Greek 5* and is obligatory for all Freshmen in the A.B. course with three years of preparation in Greek.

The reading of the *Olynthiacs* of Demosthenes, I, II, III, with a careful study of the life and political activities of the orator; the careful reading of Euripides' *Hecuba*, with a thorough study of the Greek tragedy, its spirit and structure, and the Greek stage; the study of Euripides, the dramatist, by the reading of selections from his other plays. Sight reading in selections from Herodotus.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Euripides' Hecuba*, Bond and Walpole.

Demosthenes' Olynthiacs, Tyler.

Herodotus, Merry.

Professors NELLIGAN and O'BRIEN.

Greek 7. Intermediate Greek. This course is obligatory for all Sophomores in the A.B. course, who offer as credit *Greek 1* and *2*.

A comprehensive knowledge of the story of the *Iliad* from the close reading of the translation of Lang, Leaf, and Myer edition is assumed. Likewise credit for approximately 1500 lines of the original text of the *Iliad* is required.

The *Odyssey* of Homer: Books IX and X are read, together with a careful study of the introduction, and continuous reference to the notes and vocabulary. References: Jebb, Lang, Leaf, Murray, Gladstone, Translation—Butcher and Lang, Cowper, Worsley, Bryant.

The reading of Plato's *Apology*, with a careful study of the trial and death of Socrates. References: Dyer, Flagg, Stock, Kitchel, Xenophon's *Memorabilia*.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Homer's Odyssey*, Goodwin.

Plato's Apology, Jowett.

Professors MICHAUD, O'DRAIN and Assistant Professors JOSEPH FLANAGAN and SHEA.

Greek 8. Intermediate Greek. This course is a continuation of *Greek 7* and is obligatory for all Sophomores in the A.B. course who offer as credit *Greek 1, 2 and 7*.

The reading of Euripides' "Hecuba," with a thorough study of Greek tragedy, its spirit and structure, and the Greek stage. The reading of the Olynthiacs of Demosthenes, I, II, III, with a careful study of the life and political activities of the orator.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Euripides' Hecuba*, Bond and Walpole.

Olynthiacs, Tyler.

Professors MICHAUD, O'DRAIN and Assistant Professors JOSEPH FLANAGAN and SHEA.

Greek 9. Advanced Greek. This course is obligatory for all Sophomores in the A.B. course who offer as credit *Greek 3 and 4, or 5 and 6*.

A study of the principles of Oratorical Composition and Rhetorical Analysis is made as exemplified in the Philippics of Demosthenes, together with a study of the historical issue at hand.

A careful reading of Sophocles' *Oedipus Tyrannus*, with character study and analysis, and study of the development and function of the Greek Chorus.

Four hours per week for one semester.

Four semester hours credit.

Texts: *Sophocles' Oedipus Tyrannus*, White.

Demosthenes' Philippics, I, II, Tyler.

Assistant Professors BIGGINS and SHEA.

Greek 10. Advanced Greek. This course is a continuation of *Greek 9* and is obligatory for all Sophomores in the A.B. course who offer as credit *Greek 9*.

A careful study of Demosthenes' "De Corona" with comparative study of Aeschines against Ctesiphon.

Four hours per week for one semester.

Four semester hours credit.

Text: *Demosthenes' De Corona*, Tyler.

Assistant Professors BIGGINS and SHEA.

Greek 11. Advanced Greek. A brief course in Demosthenes' "De Corona" designed for Juniors in the A.B. course who were admitted to Freshman class without any high school preparation in Greek.

Two hours per week for one semester.

Two semester hours credit.

(Not offered 1929-1930.)

Greek 12. Greek Tragedy. Elective for Juniors and Seniors in the Arts course.

A critical study of the Greek tragedy in general, its spirit and structure, the development and function of the Greek chorus; a comparative study of Euripides and Sophocles as tragedians by a comparative study of their works.

Two hours per week for two semesters.

Four semester hours credit.

(Not offered 1928-1929)

Greek 13. Advanced Greek. Elective for Juniors and Seniors in the A.B. course.

In this course and in Course 14, even more particularly, the aim is to orientate whatever has not been formally treated in any of the preceding Greek courses and thus round out a thorough undergraduate cycle.

General surveys: Civilization; Literature; History; Philosophy and Religion. References: Grote, Thirlwall, Curtius, Bury, Whibley, Zimmern, Smith-Marindin, Livingston, Butcher, Jebb, Donaldson, Moulton, Haigh, Norwood, G. Murray, Gladstone, Lang, Leaf, J. L. Myres.

Texts: *Herodotus* (Merry, Oxford), about 1000 lines.

Herodotus: Summary of "The Nine Muses" (Rawlinson or Godley).

Thucydides: The Disaster of the Sicilian Expedition, Book 7.

Thucydides: Summary of the entire history (Jowett, Crawley, Bloomfield).

Xenophon: Special prescribed work in the minor treatise (Dakyns).

Aeschylus: Prometheus Bound, Agamemnon. (Oxford-Clarendon). *Analysis and appreciation of the "Suppliants," "The Persians," "The Seven against Thebes," and the Oresteian trilogy.* (Morsehead, Murray, Swanwick, Blackie, Plumptre, Cookson).

Special research work in Turner, Gomperz, Stace and C. H. Moore.

Three hours per week for two semesters.

Six semester hours credit.

Professor O'DRAIN.

(Not to be offered 1930-1931.)

Greek 14. Advanced Greek. Elective for Juniors and Seniors in the A.B. course.

In this course as in Course 13 a zealous attempt is made to expose the world's debt to Hellas and to inspire a love of Hellenic humanism. The diffusion of her priceless legacy and the splendor of her glorious pageant should confirm classic ideals.

General surveys: Social Life; Art and Archaeology; Geography and Science. References: Strabo; Pausanias; Plutarch; Athenaeus; Plato; Aristotle; Aristophanes; Lucian; (Murray-Grundy, Richter, Tozer, Singer, Sandys, British Museum Guide).

Texts: *Lucian (selected: C. R. Williams, Allinson) about 1000 lines. Summaries from A. M. Harmon (Putnam).*

Summaries from H. W. and F. G. Fowler (Oxford).

Aristophanes: The Clouds (Felton, Forman, Humphreys, Merry, Graves). Analysis and appreciation of "The Birds," "The Frogs," "The Knights," "Plutus," based on Murray, Rogers, Frere, and Hickie.

Sophocles: individual oral examination on the analysis and the appreciation of the seven plays.

Euripides: individual oral examination on the analysis and the appreciation of "Iphigeneia at Aulis," "Bacchae," "Hippolytus," "Medea," "Iphigeneia in Tauris," "Ion," and the choice of any other one except "Hecuba."

The Greek Fathers: about 1000 lines.

Three hours per week for two semesters.

Six semester hours credit.

Professor O'DRAIN.

(To be offered 1930-1931.)

GERMAN

Professors BOURSRY and D'ANDRASSY

The courses offered in German are intended for those students who either desire to specialize in Chemistry or Engineering or who intend to follow the profession of medicine. It is essential for the above mentioned students to have a reading knowledge of German, for German has its greatest literature in Chemistry, Engineering and other sciences. Consequently, they, in making their selection, should elect German.

German 1. Elementary German. Elective for students who have not presented German for admission.

A thorough drill in the rudiments of the grammar, supplemented by the writing of English prose into German, involving the more usual

syntactical constructions; drills in dictation and conversation; translation of selections from modern authors into idiomatic English.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *German Grammar, Bacon (complete).*

German Science Reader, Gare.

Märchen und Ergählungen I and II.

Professor BOURSRY.

German 3. Intermediate German. Elective for students offering *German 2* and students who have presented elementary German (two years) for admission.

Reading of modern and classical authors; a thorough review of the grammar, supplemented by the writing of English prose into German, involving all syntactical constructions; dictation; discussion in German of the scientific theories exposed by the authors read.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *German Grammar, Bacon.*

Krüger and Smith's German Conversation Book.

Jungfrau von Orleans, Schiller.

Chemical German, Greenfield.

Professor D'ANDRASSY.

German 7. Scientific German. Purpose: to familiarize students with the more technical terminology of modern scientific German.

Six hours per week for one semester.

Six semester hours credit.

Texts: *German Science Reader (Wait) and selected articles from current scientific periodicals.*

Chemical German (Phillips).

(Offered only in year 1927-1928.)

HISTORY

Professors BURKE, MEAGHER and Assistant Professor KEVILLE

History 1. The Middle Ages.

The conditions of Europe at the close of the Tenth Century; Feudalism; moral revival of the Eleventh Century; the Cluniac Reform;

Hildebrand and his successors; The Medieval Church; the Papacy, Monasticism and the Sacramental System; The Crusades; Social and Economic features of the Middle Ages; Medieval Education; Expansion of Europe to the East; the Renaissance.

Three hours per week for one semester.

Three semester hours credit.

Text: *Volume II, Guggenberger.*

(Not offered 1929-1930.)

History 2. The Reformation.

Causes and occasions of the religious upheaval of the Sixteenth Century; the true nature of the religious revolt of the Sixteenth Century as opposed to the traditional ex parte views; the expansion of Europe into new lands; the French Revolution.

Three hours per week for one semester.

Three semester hours credit.

Text: *Volume I, Hayes.*

(Not offered 1929-1930.)

History 3. Universal History. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

A course dealing with the most important historical events from the early Middle Ages to Modern Times.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Notes.*

(Not offered 1929-1930.)

History 4. History of Law. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Professor's Notes.*

(Not offered 1929-1930.)

History 6. Mechanics of History (First Term); Christian Antiquity to the Reformation (Second Term). Required of Freshmen in the A.B. and Ph.B. courses.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Volume II, Guggenberger.*

Professor's Notes.

Professor BURKE and Assistant Professor KEVILLE.

Outline of Courses

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History 7. Europe, From the Reformation to the World War. Required of Sophomores in the A.B., B.S., and Ph.B. courses.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Volume I, Hayes.*

Professor's Notes.

Professor MEAGHER and Assistant Professor KEVILLE.

History 8. Political Science.

Nature and Scope; Systems of Government; Political Parties; Administration.

Two hours per week for two semesters.

Four semester hours credit.

Texts: *Professor's Notes.*

(Not offered 1929-1930.)

History 9. Constitutional History of the United States. Elective for Seniors and Juniors in the A.B. and Ph.B. courses; required of Juniors electing pre-legal subjects.

The origin of the Union, the Confederation; the struggle for the present Constitution; real character of the Constitution; internal dissensions during Washington's administration; Alexander Hamilton. The influence of the French Revolution. The fall of Federalism; Jefferson; the purchase of Louisiana; history of slavery to 1787 and compromises in the Constitution; Marshall and the Constitution; history of Constitutional amendments and consideration of cases illustrating the amendments.

Two hours per week for two semesters.

Four semester hours credit.

Texts: *History of the Constitution, Cooley.*

Professor's Notes.

Professor BURKE.

History 10. Constitutional History of the United States. Elective for Seniors in the A.B. and Ph.B. courses who have completed Course 9; required of Seniors electing pre-legal subjects.

The functional division of Powers: the Judiciary, the Executive, the Legislative, interrelations of the three departments; growth of the American Constitutional System; fundamental principles of the American Constitution; general evaluation of the American Constitutional System, its weaknesses and deficiencies, its superiorities.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *History of the Constitution, Cooley.*

Professor's Notes.

Professor BURKE.

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History 20. History of the Papacy Through the Crusades.

Two hours per week for two semesters.

Four semester hours credit.

Text: *General History of the Christian Era, Volume I, Guggenberger.*

(Not offered 1929-1930.)

History 21. Europe, from the Religious Revolution Through the Renaissance.

Two hours per week for two semesters.

Four semester hours credit.

Text: *General History of the Christian Era, Volume II, Guggenberger.*

(Not offered 1929-1930.)

History 22. Europe, the Social Revolution.

Two hours per week for two semesters.

Four semester hours credit.

Text: *General History of the Christian Era, Volume II, Guggenberger.*

(Not offered 1929-1930.)

LATIN

Professors BOURSRY, D'ANDRASSY, GILLERAN, MORAN, MULLIGAN, O'BRIEN, O'DRAIN and SMITH

Assistant Professors BIGGINS, COLLINS, JOSEPH FLANAGAN, HALE, H. McDONALD and TRIBBLE

Latin 1. Cicero, Horace, Virgil. This course is obligatory for all students in the A.B. and Ph.B. (Latin) courses. Prerequisite: four entrance units credit.

In the beginning of this course the value of humanistic studies and their influences on man are emphasized by the careful study of Cicero's "Pro Archia," carefully analyzing the great orator's opinion on their value and influences. Secondly, a study of the canons on Art, and on Literature in particular is made, as they are exemplified in Horace's "Ars Poetica." Thirdly, a study of the epic style, and especially the style of Virgil, is made by a careful reading of the Ninth Book of the Aeneid.

Five hours per week for one semester.

Five semester hours credit.

Texts: *Pro Archia, Cicero.*

Ars Poetica, Horace.

Aeneid, Book IX, Virgil.

Professors BOURSRY, D'ANDRASSY, MORAN, O'BRIEN and *Assistant Professors* COLLINS, HALE and TRIBBLE.

Latin 2. Horace and Cicero. This course is obligatory for all students in the A.B. and Ph.B. (Latin) courses. Prerequisite: *Latin 1.*

This course is a continuation of *Latin 1*, comprising a study of Latin lyric poetry by the reading of the Odes of Horace as examples of the classical lyrics, and serves as an introduction to courses 4 and 5 by acquainting the student with the fundamentals of Rhetorical Analysis in the reading and analysis of Cicero's "Pro Marcello." The reading of selections from Livy.

Five hours per week for one semester.

Five semester hours credit.

Texts: *Selections from the Odes, Horace.*

Pro Marcello, Cicero.

Selections from Livy.

Professors BOURSRY, D'ANDRASSY, MORAN, O'BRIEN and Assistant Professors COLLINS, HALE and TRIBBLE.

Latin 3. Latin Composition. This course is obligatory for all students in the A.B. and Ph.B. (Latin) courses.

A written exercise, once a week, in prose composition, in imitation of Ciceronian style; one exercise semi-monthly in verse composition.

One hour per week for two semesters.

One semester hour credit.

Texts: *Aids to Latin Composition, Bradley.*

Elegiac Verse, Lupton.

Professors BOURSRY, D'ANDRASSY, MORAN, O'BRIEN and Assistant Professors COLLINS, HALE and TRIBBLE.

Latin 4. Cicero, Horace and Juvenal.

A comparative study of the Latin Satirists, Horace and Juvenal, and their influences on modern literature. A special study of Oratorical Composition and Analysis is made by a thorough study of the principles of Oratorical Composition as exemplified in Cicero's "Pro Lege Manilia."

Six hours per week for one semester.

Six semester hours credit.

Texts: *Pro Lege Manilia, Cicero.*

Selections from the Satires, Horace.

Selections, Juvenal.

References: *Rhetoric, Aristotle* (Cope-Sandys Edition).

De Oratore, Cicero.

Instit. Orat., Quintilian.

(Not offered 1929-1930)

Latin 5. Cicero and Tacitus.

The study of Tacitus as a stylist. A further study of the principles of Oratorical Composition by a thorough analysis of Cicero's "Pro Milone."

Six hours per week for one semester.

Six semester hours credit.

Texts: *Pro Milone, Cicero.*

Annales, Tacitus.

References: *Whately.*

Bain.

Genung.

(Not offered 1929-1930)

Latin 6. Latin Composition. This course is obligatory for all students in the A.B. and Ph.B. (Latin) courses. Prerequisite: *Latin 3.*

A written exercise once a week in prose composition in imitation of Ciceronian style; one exercise monthly in lyric and satirical verse.

One hour per week for two semesters.

One semester hour credit.

Texts: *Professor's Notes.*

Lyric Composition, Lupton.

Models from Horace, Persius and Juvenal.

Professors GILLERAN, MULLIGAN, O'DRAIN, SMITH and Assistant Professors BIGGINS and JOSEPH FLANAGAN.

Latin 10. Conversational Latin. This course is elective for Juniors and Seniors in the A.B. and Ph.B. (Latin) courses.

Two hours per week for two semesters.

Four semester hours credit.

Text: *Professor's Notes.*

(Not offered 1929-1930)

Latin 11. Cicero and Tacitus. This course is obligatory for all students in the A.B. and Ph.B. (Latin) courses. Prerequisite: *Latin 2.*

The study of Tacitus as a stylist. A special study of Oratorical Composition and Analysis is made by a thorough study of the principles of Oratorical Composition as exemplified in Cicero's "Pro Lege Manilia."

Five hours per week for one semester.

Five semester hours credit.

Texts: *Orations of Cicero, Bennett.*

Tacitus, Annales, Holy Cross Press.

References: *Whately, Bain, Genung.*

Professors GILLERAN, MULLIGAN, O'DRAIN, SMITH and Assistant Professors BIGGINS and JOSEPH FLANAGAN.

Latin 12. Cicero, Horace and Juvenal. This course is obligatory for all students in the A.B. and Ph.B. (Latin) courses. Prerequisite: *Latin 11.*

A comparative study of the Latin Satirists, Horace and Juvenal, and their influences on modern literature. A further study of the principles of Oratorical Composition is made by a thorough analysis of Cicero's "Pro Milone."

Five hours per week for one semester.

Five semester hours credit.

Texts: *Orations of Cicero, Bennett.*

Works of Horace, Bennett.

Juvenal, Selections, Holy Cross Press.

Professors GILLERAN, MULLIGAN, O'DRAIN, SMITH and Assistant Professors BIGGINS and JOSEPH FLANAGAN.

Latin 13. Advanced Latin Literature. Elective for Juniors and Seniors in the A.B. and Ph.B. (Latin) courses.

Reading and critical appreciation of Latin prose and poetry.

Texts: Prose: *Duo Captive, Plautus; Selections form De Natura Rerum, Lucretius; De Senectute, Cicero.*

Poetry: *Roman Lyric Poetry, Catullus.*

Three hours per week for two semesters.

Six semester hours credit.

Assistant Professor H. McDONALD.

(Not to be offered 1930-1931)

Latin 14. Advanced Latin Literature. Elective for Juniors and Seniors in the A.B. and Ph.B. (Latin) courses.

Reading and comparative study of representative Latin prose and poetry from the middle of the Augustan Age to the close of the Silver Age, supplemented by a study of the historical, political and social background and its influence on Roman Literature.

Poetry centers upon the study of pastoral and elegiac poetry as seen in Ovid, Virgil, Propertius and Tibullus.

Prose works afford study of epistolary style as seen in the Letters of Pliny, the Younger, and essay style as evidenced in the philosophical essays of Seneca.

Three hours per week for two semesters.

Six semester hours credit.

Assistant Professor H. McDONALD.

(To be offered 1930-1931)

MATHEMATICS

Professor MERRICK

Assistant Professors R. McDONALD, MORAN, MURRAY, NESTOR and SHEEHAN.

Mathematics 1. Plane Trigonometry. This course is obligatory for students in the Freshman class of the A.B. course who did not offer Plane Trigonometry for admission.

An introductory course in Trigonometry, treating the function of acute angles, use of natural functions, logarithms, solution of the right triangle and oblique triangle and other trigonometric operations.

Two hours per week for two semesters.

No degree credit allowed.

Text: *Trigonometry, Wentworth.*

Professor Merrick and Assistant Professors NESTOR and MURRAY

Mathematics 2. Algebra and Plane Trigonometry. This course is obligatory for all Freshmen in the B.S. course.

This course is intended to give the thorough working knowledge of Algebra and Plane Trigonometry necessary as a basis for work in the sciences.

The course is given under the following subdivisions: factoring; fractions; linear equations; exponents and logarithms; radicals; quadratic equations; functions and their graphs; advanced topics in quadratic equations and systems of equations involving quadratics; mathematical induction; inequalities; complex numbers; theory of equations and approximate roots; permutations and combinations; probability; trigonometric functions and solution of right triangles; trigonometric functions of any angle; relations between trigonometric functions; trigonometric analysis; general values of angles; inverse trigonometric functions; trigonometric equations; graphical representation of trigonometric functions; solution of oblique triangles.

Four hours per week for two semesters.

Eight semester hours credit.

Texts: *Mathematical Analysis, Griffin.*

Reference: *College Algebra, Hart.*

Assistant Professor MORAN.

Mathematics 3. Mathematical Analysis. This course is obligatory for all Sophomores in the B.S. course, majoring either in Chemistry, Physics or Metallurgy.

The course is given under the following subdivisions: rates, mean values, extremes, zero values, formulae; instantaneous rates, tangents, areas, etc., as limits; derivatives of polynomials and power functions, rates extremes, maxima and minima; simple integrals, areas, volumes

momentum, work, fluid pressure, falling bodies; logarithmic and exponential functions, compound interest law, logarithmic and semi-logarithmic graphs, differentiation and integration of logarithmic and exponential functions; rectangular coordinates, equations of motion, analytic geometry; line, circle, parabola, ellipse, hyperbola; translation, intersections; solution of equations, Horner's and Newton's methods; polar coordinates, periodic variations, derivatives; trigonometric analysis, basic identities, equations, involutes, cycloids, simple harmonic motion, damped oscillations, addition formulae, sums and products; definite integrals, length of arcs, surfaces of revolution, double integration, partial derivatives, Simpson's rule; progressions and series, investment theory, Maclaurin's series, binomial theorem; permutations, combinations, and probability, normal probability curve, method of least squares; complex number system, definitions, geometric representation, operations and applications.

Four hours per week for two semesters.

Eight semester hours credit.

Text: *Introduction to Mathematical Analysis*, Griffin.
Mathematical Analysis, Granville.

Professor MERRICK.

Mathematics 5. Calculus, Differential and Integral. Elective for Juniors in the B.S. course; required of all Juniors in the B. S. course, majoring either in Physics or Metallurgy.

The course is given under the following subdivisions: differentiation of standard elementary forms; simple applications of the derivative; successive differentiation; maxima and minima; differentials; rates; change of variable; curvature; indeterminate forms; partial differentiation; envelopes; series; expansion of functions; asymptotes; integration of standard elementary forms; definite integral; integration of rational fractions; rationalization; integration, a process of summation; successive and partial integration.

Four hours per week for two semesters.

Eight semester hours credit.

Text: *Elements of Differential and Integral Calculus*, Granville.

Assistant Professor SHEEHAN.

Mathematics 6. Obligatory for all students of the Ph.B. course.

A one-year course consisting of College Algebra, Analytic Geometry, Trigonometry, and Calculus. A rapid survey is made of the elements of Algebra, equations—linear, simultaneous and quadratic, the binomial theorem and progressions. The functional idea is then studied as the approach of Trigonometry and Analytical Geometry. Calculus is surveyed in order that the student might have a working knowledge of derivatives and integrals.

Throughout the course emphasis is placed upon such parts of Mathematics which are applicable in the sciences or the subsequent work in Mathematics itself.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Freshman Mathematics, Mullins and Smith.*

Assistant Professor MURRAY.

Mathematics 7. Calculus, Differential and Integral. This course is elective for Seniors in the B.S. course. Prerequisite: *Mathematics 5.*

This course supplements *Mathematics 5.*

Three hours per week for two semesters.

Six semester hours credit.

Text: *Elements of Differential and Integral Calculus, Granville.*

(Not offered 1929-1930)

Mathematics 8. Differential Equations. Elective for seniors in the B.S. course; required of all Seniors in the B.S. course, either majoring in Physics or Metallurgy.

An introductory course in differential equations, covering equations involving two variables.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Differential Equations, Murray.*

Assistant Professor R. McDONALD.

Mathematics 20. Analytic Geometry.

Loci and equations; the straight line, the circle; different systems of co-ordinates; the parabola; the ellipse; the hyperbola.

Three hours per week for one semester.

Three semester hours credit.

Text: *Mathematical Analysis, Young and Morgan.*

(Discontinued September, 1925)

PHILOSOPHY

Professors KOEN and SULLIVAN

Assistant Professors GRAHAM, J. MURPHY, SHEA, WELCH and ASSISTANTS

Philosophy 1. Logic. This course is obligatory for all Juniors in the A.B., Ph.B. and B.S. courses.

Definition and division of Philosophy; natural and artificial logic; the three operations of the mind: idea, judgment, and reasoning.

The study of the Idea: definition, extension and comprehension—division—the universal idea, predicables and predicaments. Terms: mental and oral—division—analogy and supposition.

The study of the Judgment: definition—propositions, their nature and division—extension and comprehension of the predicate—quantity and quality of propositions—opposition, conversion and equivalence of propositions.

The study of Reasoning: the syllogism, various kinds and their laws—figures and modes; other forms of argumentation; Demonstration and its divisions; Deduction and induction, complete and incomplete.

Nine hours per week for one-half semester.

Four and one-half semester hours credit.

Text: *Logic and Epistemology*, Cotter.

Assistant Professors GRAHAM, J. MURPHY, SHEA, WELCH and ASSISTANTS.

Philosophy 2. Epistemology. This course is obligatory for all Juniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 1*.

The study of truth: logical and moral truth; falsity: the study of truth and falsity as completely found in the judgment; the study of the general and partial causes of falsity; the study of the mind in relation to truth: ignorance, doubt, opinion and certitude, refutation of Skepticism and Methodic Doubt; the means of arriving at certitude: senses, (external and internal), intelligence, reason, intellectual memory; the rejection of the various schools of Idealism; the establishing of the proximate and ultimate motives and criteria of truth; rejection of false theories; Objective Evidence, the ultimate criterion of truth.

Nine hours per week for one-half semester.

Four and one-half semester hours credit.

Text: *Logic and Epistemology*, Cotter.

Assistant Professors GRAHAM, J. MURPHY, SHEA, WELCH and ASSISTANTS.

Philosophy 3. Ontology. This course is obligatory for all Juniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 2*.

The importance of this course lies in the fact that it establishes certain and valid principles that form the basis of advanced work in Natural Theology.

The definition and proof of the objectivity of the idea of being; the analogy of being, its descent or contraction; how the precise concept of being is obtained; essences: physical and metaphysical, their objectivity; the transcendental properties of being, i. e., unity, truth and goodness; the possibles: their formal nature and their foundation; rejection of adverse theories; substance and accident: definition and division of, their

objectivity; rejection of Locke's theory; causality: efficient, formal, material and final—definition and proof of their objectivity—rejection of Occasionalism; Infinite and finite; nature and person.

Nine hours per week for one-half semester.

Four and one-half semester hours credit.

Text: *Ontology*, Colligan.

Assistant Professors GRAHAM, J. MURPHY, SHEA, WELCH and ASSISTANTS.

Philosophy 4. Cosmology. This course is obligatory for all Juniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 3*.

The study of the origin of the world: Pantheism, Materialism, Creation; the divine purpose in creating; the world in its nature: finite, composite and contingent; essential constituents of bodies: Dynamic and Atomic theories; Hylomorphism: the nature of matter and form; primary and secondary qualities of bodies; activity of bodies; radio-activity; law of conservation of energy; transmutation of matter; space and time; Descartes, Clarke, Balmes, on the nature of space; Kant's theory of space and time; laws of nature; miracles.

Nine hours per week for one-half semester.

Four and one-half semester hours credit.

Text: *Cosmology*, Colligan.

Assistant Professors GRAHAM, J. MURPHY, SHEA, WELCH and ASSISTANTS.

Philosophy 5. Fundamental Psychology. This course is obligatory for all Seniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 4*.

Life in General: properties of living and non-living bodies; immanency of action; Scholastic concept of life.

Plant Life: the plant as a living body; unity and divisibility of the plant soul; the vegetative functions—nutrition, growth, reproduction.

Animal Life: sensitive life; unity and divisibility of the animal soul; instinct and intelligence; theories on the origin of the instinct.

Origin of Life: the Scholastic theory on the origin of the first living bodies; refutation of Spontaneous Generation; the Scholastic doctrine on the origin of the species of plants and animals; Biological Evolution.

Five hours per week for one-half semester.

Two and one-half semester hours credit.

Text: *Fundamental Psychology*, Dolan.

Professor KOEN and ASSISTANT.

Philosophy 6. Advanced Empirical Psychology. This course is obligatory for all Seniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 5.*

The first part of this course is devoted to a study of sensitive life, including the nature of sensation and its properties; the doctrine of the species; the external and internal senses, hallucinations and dreams; the perception of the material world and the refutation of the skeptical theories of Descartes, Locke, Berkley, Hume, Mill, Bain; the sensuous appetite.

The second part of this course is devoted to a study of intellectual life, including the origin of ideas, judgment and reasoning, attention and reflection, memory, the rational appetite—the will, its nature and freedom.

Five hours per week for one-half semester.

Two and one-half semester hours credit.

Texts: *Advanced Psychology, Dolan.*

Psychology, Maher.

Professor KOEN and ASSISTANT.

Philosophy 7. Advanced Rational Psychology. This course is obligatory for all Seniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 6.*

A study of the human soul, its substantiality, individuality, simplicity and spirituality; refutation of false theories on the nature of the human soul: Hume, Mill, James, Monism, Höffding; origin and destiny of the human soul; refutation of Anthropological Evolution.

Five hours per week for one-half semester.

Two and one-half semester hours credit.

Texts: *Advanced Psychology, Dolan.*

Psychology, Maher.

Professor KOEN and ASSISTANT.

Philosophy 8. Natural Theology. This course is obligatory for all Seniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 7.*

The Existence of God: Monotheistic philosophers on our knowledge of the existence of God; Ontologism—Malebranche, Gioberti, Rosmini; Traditionalism; ontological proof of St. Anselm, Descartes, Leibnitz, for the existence of God; the metaphysical proof; the argument from design; the moral proof; Kant, Mill, Spencer, Mallock, et al., on the proofs of God's existence. Atheism, Agnosticism; Religious and moral consequences of Agnosticism.

The Essence of God: The idea of the Infinite; unity of God; physical and metaphysical essence; Polytheism; Pantheism; Modern Pan-

theists: Spinoza, Fichte, Schelling, Hegel; Anthropomorphism; Herbert Spencer, on the anthropomorphic idea of God.

The Divine Attributes: immortality, eternity and immensity of God; St. Thomas, Lessius, Newton, Clarke, on the Immensity of God; simplicity and infinity of God; the Divine Intellect and Knowledge; Foreknowledge of God; Objections against the Divine Foreknowledge of free actions; the Divine Will; freedom of the Divine Will; Omnipotence of God; Mill's objections against the Divine Omnipotence.

Concurrence of God in the Actions of Creatures: preservation of creatures; supernatural, natural, mediate and immediate concurrence; St. Thomas and "Premotion." Divine Providence and its relation to physical and moral evils; the possibility of a Supernatural Providence.

Supplementary Questions: Schopenhauer's "World Will;" Hartmann's "Unconscious;" Haeckel's Monism; Mansel, on contradiction in the idea of God; Spencer, on the idea of the absolute.

Five hours per week for one-half semester.

Two and one-half semester hours credit.

Text: *Natural Theology, Dolan.*

Professor KOEN and ASSISTANT.

Philosophy 9. History of Philosophy.

A study of the Oriental, Greek, Christian and Scholastic Schools of Philosophy; Modern Philosophy; various systems and theories of Descartes and his followers, Spinoza, Locke, Hume, Voltaire, Leibnitz, Berkeley, Rousseau; the Scottish School and the Transcendentalists: Kant, Fichte, Schelling, Schopenhauer and Hegel; Neo-Kantians; Neo-Scholastics; Thomistic Philosophy under Leo XIII.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Professor's Notes.*

History of Philosophy, Turner.

History of Philosophy, Coppens, S.J.

(Not offered 1929-1930)

Philosophy 10. General Ethics. This course is obligatory for all Seniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 4.*

Definitions, nature, object, necessity of Ethics; false theories regarding the fundamental principles of Ethics; the ultimate end of man; beatitude; the human act; merit and accountability; the passions; virtue and vice; morality of human acts; false opinions of the nature of morality; the norm of morality and false norms: Utilitarianism and Hedonism; Bentham, Mill and Spencer; the eternal law and the natural law; properties and sanction of the natural law; nature and origin of moral obligation;

false theories on the origin of moral obligation; Kant's categorical imperative; Conscience.

Five hours per week for one semester.

Five semester hours credit.

Texts: *Fundamental Ethics*, Sullivan.

Reference: *Leibel*.

Professor SULLIVAN and ASSISTANT.

Philosophy 11. Special Ethics. This course is obligatory for all Seniors in the A.B., Ph.B. and B.S. courses. Prerequisite: *Philosophy 10*.

Man's duty to his Creator: obligations of accepting Divine revelation; the obligation of inner and outer worship to God; Rationalism; Indifferentism.

Man's duty to himself: man's duty to preserve himself; suicide.

Man's duty to his neighbor: direct and indirect killing; killing done in self-defence; lying; mental reservation.

Right of ownership: Communism and Socialism; theories of Henry George; Herbert Spencer on the right of property; modes of acquiring property; rights of disposing property by will; contracts; relations of capital and labor; trade unions; strikes.

Society in general: nature and end of domestic society; unity and indissolubility of matrimony; divorce; parental authority; education of the child.

Civil Society: nature, end and origin; false theories on the origin of civil society; Hobbes and Rousseau; the Scholastic doctrine; forms of civil government; citizenship; universal suffrage; the functions of civil government—legislative, judiciary, executive; taxation; death penalty; freedom of worship; freedom of the press; state education.

International Law: various meanings of *Jus Gentium*; foundation of international law; mutual relations of nations; right of commerce; rights of neutrals; nature and justice of war; arbitration.

Five hours per week for one semester.

Five semester hours credit.

Texts: *Professor's Notes*.

Social Ethics, Fordham University Press.

Reference: *Leibel*.

Professor SULLIVAN and ASSISTANT.

Philosophy 12. Seminar. The Seminar which is conducted by the Philosophical Academy is held once a week throughout the year. Philosophical essays and discussions on the various philosophical problems by members of the Aquinas Circle constitute the routine work of the Seminar.

One semester hour credit.

Professor SULLIVAN and the FACULTY.

Philosophy 13. Pedagogical Latin. This course is elective for all Juniors in the A.B. and Ph.B. (Latin) courses.

Class-room discussion conducted in Latin.

Basis of Discussion: the Writings of the Latin Fathers, Tertullian, Minucius Felix, Saint Cyprian, Lactantius, Saint Ambrose, Saint Jerome, Saint Leo the Great, Saint Bernard, Saint Augustine.

Three hours per week for two semesters.

Six semester hours credit.

(Not offered 1929-1930)

Philosophy 15. Pedagogical Latin. Advanced Course. This course is elective for all Seniors in the A.B. and Ph.B. (Latin) courses who offer Philosophy and Latin credits. Admission to this course is had at the discretion of the Dean and the Committee on Academic Standing.

The object of this course is two-fold: to acquire knowledge of Latin and a knowledge of Scholastic Ethics.

Class-room discussion and readings in philosophical Latin.

Basis of discussion and readings: Ethical readings in Latin: Socialism; right of private ownership; false doctrines and theories concerning property; domestic and civil society; origin of the state; origin of authority; subject of authority; industrial and sociological problems of modern society.

Collateral readings: Latin Texts of Scholastic Philosophers.

Three hours per week for two semesters.

Six semester hours credit.

Text: *Philosophia Moralis in usum Scholarum, Auctore, Victore Cathrein.*

Professor SULLIVAN.

PHYSICS

Professor MERRICK

Assistant Professors R. McDONALD, MORAN, MURRAY, NESTOR and SHEEHAN

Physics 1. General Physics. This course is obligatory for all students in the A.B. and Ph.B. courses. Prerequisites: Advanced Algebra, Trigonometry and fundamentals of Analytic Geometry.

This course is intended to give the student an appreciation of the physical phenomena and their laws and it provides a solid basis for a more advanced study of the subject. The method of treatment is historical and physical rather than mathematical. The fundamental prin-

ciples of the mechanics of solids, liquids and gases, wave motion and radiation, sound, heat, light, magnetism, and electricity are treated in the lectures. The lectures are illustrated by numerous and varied lecture-table demonstrations, lantern slides and moving pictures.

The laboratory work is arranged as a complement of the lecture course, so that the student has an opportunity to verify by personal observation and calculation the various laws and their applications. In this part of the course, method in observations and records is insisted upon. The elementary theory of physical measurements and discussion of errors with their applications in written reports are required of the students.

Three lecture hours and one laboratory hour per week for two semesters.

Eight semester hours credit.

Texts: Lecture: *Elements of Physics, Smith.*

Laboratory: *Professor's Notes.*

Professor MERRICK and Assistant Professors MORAN and NESTOR.

Physics 2. Mechanics, Heat and Sound. This course is obligatory for all Freshmen in the B.S. course. *Mathematics 2* taken simultaneously.

A mathematical treatment designed to meet the needs of the student desirous of pursuing major subjects in Chemistry, Physics or Metallurgy.

The course is given under the following sub-divisions: physical magnitudes, units and measurements; properties of matter in general; the nature and the measure of force; work, energy and power; equilibrium; motion of solid bodies; gravitation; machines, friction; properties of elastic bodies; pressure in liquids; flowing liquids; vibrations and waves; temperature and thermal expansion; effects and measurement of heat, gases and vapors; thermal energy and heat engines; diffusion, transfer of thermal energy; sound; musical instruments and the scale.

Three lecture hours per week for the first semester.

Three lecture hours and one laboratory period per week for the second semester.

Seven semester hours credit.

Texts: Lecture: *Textbook of Modern Physics, Weld and Palmer.*

Laboratory: *Mechanics, Sound, Heat, Gipprich.*

Assistant Professor MORAN.

Physics 3. Light, Magnetism and Electricity. This course is obligatory for all Sophomores in the B.S. course. Prerequisite: *Physics 2*; *Mathematics 3* taken simultaneously.

A continuation of course 2 given under the following sub-divisions: magnetism, electric charges; steady electric currents; electro-chemical

phenomena; electromagnetism; induced and variable currents; electro-oscillations and electric waves; ions in gases and electrons in atoms; light and its measurement; mirrors and prisms; lenses and optical instruments; color; polarized light.

The laboratory work proceeds with the lecture course. The theories of measurements and graphical methods are insisted upon and the student is required to apply these to all laboratory reports.

Each student is required to submit each semester an essay on some subject analogous to the lecture matter.

Three lecture hours and one laboratory hour per week for two semesters.

Eight semester hours credit.

Texts: Lecture: *Textbook of Modern Physics: Weld and Palmer.*

Laboratory: *General Physics for the Laboratory: Taylor, Watson and Howe.*

Professor MERRICK.

Physics 4. Magnetism and Electricity. This course is obligatory for B.S. students either majoring in Physics or Metallurgy. Prerequisites: *Physics 3 and Mathematics 3.*

This course is more mathematical than that of *Physics 3*. It is given under the following sub-divisions: electrolysis; resistance and electromotive force; induced electromotive force; electric charge and the condenser; the electric field; the electron theory; electromagnetic and electrostatic units; magnetism of iron; electrical measurements; elementary theory of alternating currents.

Three lecture hours and one laboratory hour for one semester.

Four semester hours credit.

Texts: *Electricity and Magnetism, Franklin and MacNutt.*

Lessons and Problems in Electricity, Page.

Professor MERRICK.

Physics 5. Heat and Elementary Thermodynamics. This course is obligatory for B.S. students either majoring in Physics or Metallurgy. Prerequisites: *Physics 3 and Mathematics 3.*

The course is given under the following sub-divisions: thermodynamic principles and definitions; properties of perfect gases; expansion and compression of gases; cycles of heat engines using gas; properties of vapors; entropy; expansion and compression of vapors; cycles of heat engines using vapors; flow of fluids; applications of thermodynamics of compressed air and refrigerating machinery.

Three lecture hours and one laboratory hour for one semester.

Four semester hours credit.

Text: *Elements of Engineering Thermodynamics; Moyer, Calderwood, Potter.*

Professor MERRICK.

Physics 6. Mechanics. This course is obligatory for B.S. students either majoring in Physics or Metallurgy. Prerequisites: *Physics 3 and Mathematics 3.*

The course is given under the following sub-divisions: simple statics, work and energy; dynamics of translatory motion; dynamics of rotary motion; hydrostatics; hydraulics; statics of elasticity; dynamics of elasticity.

Three lecture hours and one laboratory hour for one semester.

Four semester hours credit.

Text: *Mechanics, Franklin and MacNutt.*

Assistant Professor R. McDONALD.

Physics 7. Optics. This course is obligatory for B.S. students either majoring in Physics or Metallurgy. Prerequisites: *Physics 3 and Mathematics 3.*

The course is given under the following sub-divisions: object and image; the lens; the single slit; the double slit; N slits; the prism; the critical angle; interference between two beams; the Michelson interferometer; the parallel-plate interferometer; polarized light; rotation of the plane of polarized light; elliptically polarized light; the reflection of polarized light; the spectrophotometer.

Three lecture hours and one laboratory hour for one semester.

Four semester hours credit.

Texts: *College Manual of Optics, Taylor.*

Light, Drisko.

Assistant Professor R. McDONALD.

Physics 8. Mechanical Drawing. Elective for Junior and Senior B.S. students either majoring in Physics or Metallurgy.

First Term. Instruction in the correct use of drafting instruments and materials. Drawings are made in pencil and in ink, on paper and on tracing cloth and include isometric and oblique projections. Practice is given in lettering. Neatness and accuracy are required.

Second Term. A continuation of the above course giving instruction in simple perspective projections, the construction of conics and rolled curves, the making of dimensioned freehand sketches from machine parts and of accurate detail drawings from the sketches.

Two hours per week for two semesters.

Two semester hours credit.

Assistant Professor R. McDONALD.

Physics 9. Descriptive Geometry. Elective for Junior and Senior B.S. students either majoring in Physics or Metallurgy.

First Term. A study of the fundamental operations of orthographic projection and elementary problems on lines, planes and solids.

Instruction is given by means of lectures and individual class-room supervision, with especial emphasis upon the student's ability to visualize the problems and methods of solution.

Second Term. A continuation of the above course including sections, developments, tangent lines and planes, and intersections of surfaces of revolution.

Two hours per week for two semesters.

Two semester hours credit.

Assistant Professor R. McDONALD.

Physics 10. Mechanics, Sound and Heat. This course is elective for Juniors in the A.B. and Ph.B. courses; obligatory for Junior pre-medical students in the A.B. and Ph.B. courses.

Three lecture hours and one laboratory hour per week for two semesters.

Eight semester hours credit.

Texts: Lecture: *Textbook of Modern Physics, Weld and Palmer.*

Laboratory: *Mechanics, Sound, Heat, Gipprich.*

Assistant Professor SHEEHAN.

Physics 11. Light and Electricity. This course is obligatory for Seniors who completed *Physics 10.*

Two lecture hours and one laboratory hour every other week for two semesters.

Five semester hours credit.

Assistant Professor MURRAY.

Physics 12. Applied Mechanics: Statics and Kinetics. This course is obligatory for Junior B.S. students majoring in Physics and Metallurgy.

Coplanar concurrent forces; coplanar non-concurrent forces; non-coplanar forces; center of gravity, centroids; rectilinear motion; curvilinear motion; work, energy, power; moment of inertia of areas; moment of inertia of mass; motion of rigid bodies; impact; momentum; friction.

Four hours per week for two semesters.

Eight semester hours credit.

Text: *Elements of Practical Mechanics, MacInnes.*

Assistant Professor R. McDONALD.

Physics 13. Applied Mechanics: Strength of Materials. This course is obligatory for Senior B.S. students majoring in Physics and Metallurgy.

Tension and compression within the elastic limit; combined stresses; torsion; stresses in beams; deflection of beams; statically indeterminate

problems in bending; beams of materials which do not follow Hooke's Law, beam of two materials; stresses due to direct and bending loads; combined bending and twist; energy of strain.

Four hours per week for two semesters.

Eight semester hours credit.

Text: *Strength of Materials, Timoshenko.*

Assistant Professor R. McDONALD.

Physics 20. Mechanics: Kinematics, Dynamics and Fluids.

Two hours per week for two semesters.

Four semester hours credit.

Text: *College Physics, Carhart.*

(Discontinued September, 1924.)

Physics 21. Heat, Sound, Light and Electricity.

Three lecture hours and one laboratory hour per week for two semesters.

Eight semester hours credit.

Texts: *College Physics, Carhart.*

Manual of Physical Experiments, Ames and Bliss.

(Discontinued September, 1925.)

ASTRONOMY

Professor AHERN and ASSISTANT

Astronomy 1. Descriptive Astronomy. This course is elective for Seniors and Juniors in the A.B., B.S. and Ph.B. courses.

This course should be taken with *Geology 1*. It appeals particularly to prospective teachers and has an important cultural value. Special emphasis is placed on the enormous advance in astronomical knowledge in the last decade, which advance informs one of the outstanding triumphs in the history of scientific thought.

The course consists of a general survey of the various branches of Astronomy, treating of the celestial sphere; the solar system, including the sun and the planets with their satellites, the comets and meteors; the stars and nebulae.

Three hours per week for one semester.

Three semester hours credit.

Text: *Elements of Astronomy, Russel, Duggan and Stewart*, (Vols. I and II).

Professor AHERN.

GEOLOGY

Professor AHERN and ASSISTANT

Geology 1. Descriptive Geology. This course is elective for Seniors and Juniors in the A.B., B.S. and Ph.B. courses.

This course is a brief introductory course in which the principles of geological science are emphasized and some of the economic applications are indicated.

A short introductory study of mineralogy and lithology with laboratory study of mineral species and rock species; the examination of the geological processes at work modifying the earth's crust and the tabulation of their results; a discussion of the principles by which the geological record is interpreted and their application, especially, their bearing on the theory of evolution and the question of the antiquity of the human race. Laboratory illustrations.

Three hours per week for one semester.

Three semester hours credit.

Texts: *College Textbook of Geology, Chamberlain and Salisbury, revised by Salisbury and McClintock.*

Laboratory Manual of Geology, Field.

Professor AHERN.

Geology 2. Geological Foundations of Geography. Elective for students offering *Geology 1*.

This is a course in elementary physical geography or physiography, and is designed to supply prospective teachers and principals in high and elementary schools with that knowledge of land forms, their changes and their relations to human life, which is necessary for teaching geography successfully. The course is adequately illustrated, special emphasis being placed on the construction and interpretations of maps.

Two hours per week for one semester.

Two semester hours credit.

Professor AHERN.

 FRENCH

Professors DRUMM and MICHAUD

Assistant Professors BOWEN, DONOGHUE and Mr. BARRANGER

French 1. Elementary French. Elective for students who have not presented French for admission.

A thorough drill in the rudiments of the grammar, supplemented by the writing of simple English prose into French, involving the more

usual syntactical constructions; drills in dictation and conversation; translations of selections from modern authors into idiomatic English.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *French Grammar, Fraser and Squair.*

La Belle France, Monvert.

Sans Famille, Malot.

Histoire de France, Vast-Jallifer.

Assistant Professor BOWEN and Mr. BARRANGER.

French 2. Elementary French. Elective for students offering *French 1*, or students who have presented Elementary French (one year) for admission.

Reading of simple modern French prose in the forms of stories, plays, or historical or biographical sketches; a thorough review of the rudiments of the grammar, supplemented by the writing of English prose into French, involving the more unusual syntactical constructions; dictation; conversation, including the discussion of current events.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *French Grammar, Fraser and Squair.*

Abbé Constantin, Halevy.

Histoire de France, Vast-Jallifer.

MR. BARRANGER.

French 3. Intermediate French. Elective for students offering *French 2*, and those students who have presented elementary French (two years) for admission.

Reading of modern and classical authors; a thorough review of the rudiments of the grammar, supplemented by the writing of English prose into French, involving all important syntactical constructions; dictation; criticisms, oral and written, of the literary merits of the authors read.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *French Grammar, Fraser and Squair.*

Book of French Verse, Lucas.

French Composition and Syntax, Bovet.

Le Blé qué lève, Bazin.

Le Voyage de Monsieur Perrichon, Labiche.

Professors DRUMM, MICHAUD and Assistant Professor DONOGHUE

French 4. Advanced French. Elective for students offering *French 3*, and students who have presented intermediate French for admission.

Reading of modern and classical prose writers and poets; study of the fundamental principles of each poetic school, of the salient features of each writer, and the technique of the novel; review of the grammar; literary criticism of the authors read; composition of French verse.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Grammar, Fraser and Squair.*

Athalie, Racine.

Book of French Verse, Lucas.

Cyrano de Bergerac, Rostand.

Assistant Professor BOWEN and MR. BARRANGER.

French 5. French Literature. Elective for students offering *French 1* and *2*, and students who have presented elementary French (two years) for admission.

The formation of the French Language, the Langue d'oc and the troubadours, the Langue d'oïl and the Trouveres (epics, etc.); early history (the Four Chroniclers); drama in the Middle Ages (influence of the Church, miracle-plays, mysteries, comedy); Villon and the balade.

The Renaissance: causes and progress; relations with Catholic and Protestant Churches; writers, especially Rabelais, Ronsard, Montaigne; the theatre: Jodelle and the three unities.

The Golden Age: reform of verse: Malherbe and later Boileau; the French Academy; influence of the Salons; Jansensim and Pascal; great preachers. Bossuet, Bourdaloue, Fenelon, etc.; Memoirs and Maximes; development of the novel; La Fontaine and the fable; the classic theatre: Corneille, Racine, Moliere, etc.

The Eighteenth Century: Montesquieu and his influence in America; Skepticism: Voltaire, Rousseau, etc.; revival of lyric poetry; revolutionary eloquence.

The Nineteenth Century: Reaction of Châteaubriand; Romanticism: Hugo, Lamartine, etc.; the drama; advance of literary criticism; history; popularity of the novel.

Most recent writers: great converts; modern tendencies; French as a world language.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Professor's Notes.*

(Not offered 1929-1930.)

French 7. Scientific French.

Purpose: to familiarize students with the more technical terminology of modern scientific French.

Six hours per week for one semester.

Six semester hours credit.

Texts: *Chemical French (Dolt)* and selected articles from current scientific periodicals.

(Offered only in year 1927-1928.)

SPANISH

MR. BARRANGER

Spanish 3. Intermediate Spanish. Elective for students offering *Spanish 2*, and students who have presented elementary Spanish (two years) for admission.

Reading of modern and classical authors; a thorough review of the grammar, supplemented by the writing of English prose into Spanish, involving the important syntactical constructions; dictation; literary criticisms of the authors read.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Spanish Grammar, DeVitis.*

Don Quijote de La Mancha, Cervantes.

José, Valdes.

MR. BARRANGER.

Spanish 4. Advanced Spanish. Elective for students offering *Spanish 3*, and students who have offered intermediate Spanish for admission.

Reading of modern and classical prose writers and poets; study of the fundamental principles of each poetic school, of the salient features of each writer, and of the technique of the novel; review of the grammar; composition of Spanish verse; literary criticism of the authors read.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Spanish Grammar, De Vitis.*

José, Valdes.

El Capitán Veneno, Alarcón.

Un Drama Nuevo, House and Kaufman.

(Not offered 1929-1930.)

ECONOMICS

Professor F. X. POWERS and Assistant Professor DONOGHUE

Economics 1. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

The nature of economic science and its relation to ethical and political science; production: factors of production, the law of diminishing returns, and division of labor, the advantage and disadvantage and remedies; exchange: money, trade, credit, and nature and functions of banks; consumption; the problem of distribution: wages, profits, rent, labor problem, socialistic solution, rights of property and taxation.

Two hours per week for two semesters.

Four semester hours credit.

Text: *Political Economy*, Burke.

(Not offered 1929-1930.)

Economics 2. Introduction to Accounting and to the Instruments and Records utilized in Economic Transactions. This course is elective for Juniors and Seniors in the A.B. and Ph.B. courses.

A study of the broad fundamental principles of accounting as a means of administrative control over the individual business enterprise following a consideration of its functions and terminology; a study of book-keeping and financial statement procedure, practice in methods and technique; the theory of business methods and instruments, forms of business organization, simple corporate procedure showing the change from a partnership to a corporation. This course, emphasizing always the interpretation and use of information provided by the accounting method, is designed to develop intelligent scrutiny in the analyses and understanding of the "balance sheet," "profit and loss statement," and other financial reports.

One hour per week for two semesters.

Two semester hours credit.

Text: *Bookkeeping*, Rosenkampff and Wallace.

(Not offered 1929-1930.)

Economics 3. Principles of Economics. Elective for Juniors in the A.B. and Ph.B. courses.

The nature of economic science and its relation to political science; production; factors of production, the laws of increasing and decreasing costs; exchange: money, trade, credit, the nature and functions of banks; consumption; the problem of distribution; wages, profits, rents, taxation.

The second semester of this course will be devoted almost exclusively to the application of economic principles by means of the case system.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Outlines of Economics*, Ely.

Case Book: *Economic Principles*, Vanderblue.

Professor POWERS.

Economics 4. Business Correspondence. Obligatory for Juniors electing *Economics 3*.

This course examines and outlines the theory of the application of standard English to Business Letters. The principles of modern business writing are explained, illustrated, and then applied to the various types of letters used in present-day commercial activities. The art of audience-impression by the written word is illustrated, and practical methods of handling typical business situations by mail explained.

One hour per week for one-half semester.

One-half semester hour credit.

Text: *Advanced Business Correspondence*, Hotchkiss and Kilduff.

Assistant Professor DONOGHUE.

Economics 5. Financial Management and Investments. Obligatory for Juniors electing *Economics 3*.

This course treats a business undertaking from the point of view of the financial manager. A study of the types of investment securities, the procedure by which they are issued and sold, the influences which affect their prices and the principles used in judging their fitness as instrumentalities of finance.

The relation of general business to the peculiarities of the business cycle, forms of organization considered in their legal and economic aspects, financial and operating ratios in management, methods and policies of securing permanent, temporary and working capital, and other financial problems such as depreciation, reserves and management of income and surplus are considered in theory and in practice.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Elements of Business Finance*, Bonneville.

Financial Organization and Management, Gerstsenberg.

Assistant Professor DONOGHUE.

Economics 6. Accounting. Elective for Seniors offering *Economics 3*; required of Seniors electing pre-business and pre-legal subjects.

This course is designed to acquaint the student with the fundamental principles that the accountant must use in his work. The subject matter includes theories of debit and credit, classification of accounts, under-

lying principles of the various accounting records, the business papers and documents that are used as the bases for original entry; the preparation of balance sheets and profit and loss statements; controlling accounts, handling sales and purchases; consignments; a consideration of inventories, depreciation and accruals.

During the second semester accounting as applied to the larger type of business enterprise, namely the partnership and corporation will be considered. Ample practice for students is provided.

Three hours per weeks for two semesters.

Six semester hours credit.

Text: *Accounting Theory and Practice*, Kestor.

Professor POWERS.

Economics 8. Marketing. Elective for Seniors in the A.B. and Ph.B. courses offering *Economics 3*; required of Seniors in the pre-business course.

This course will cover in some detail such topics as, analysis of the product, analysis of the market, the various marketing agencies, organized exchanges, grading, storage, co-operative marketing, general price policies, price maintenance, brands and trade marks; sales organization and administration; Purchasing: organization of department, standards, contract provisions, sources of supply, methods of perpetual inventory and its uses in purchasing.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Principles of Marketing*, Maynard, Weidler and Beckman.
Problems in Marketing, Copeland.

Professor POWERS.

EDUCATION

Professors O'GORMAN and AHERN

Assistant Professors E. B. POWERS, McCANN and MR. SULLIVAN

Education 1. History of Education.

The purpose of this course is to present a survey of the development of the educational theory and practice from ancient times through medieval times. Its special aim is to meet the needs of the Catholic student to give him a knowledge of the History of Education and to gain that sympathy with Christian institutions and men in the Middle Ages which a common faith and a spiritual heritage demand.

Survey of the development of educational theory and practice in ancient, and medieval times; Ancient education; China, Japan; Egypt; India; Persia and the Semitic People; Greek and Roman education;

early Christian education; Fathers of the Church; Medieval education and Scholasticism.

Three hours per week for one semester.

Three semester hours credit.

Text: *History of Education, Monroe.*

(Discontinued September, 1927.)

Education 2. Educational Psychology.

The need of psychology; instincts; imitation; the doctrine of interest and effort; the intellectual aspect of the mind; perception, apperception, memory, imagination, judgment; place and function of the will in life; art of questioning; the answer; mental tests; objectives of systematic teaching; stimulating pupil to think and laws of learning.

Three hours per week for one semester.

Three semester hours credit.

Text: *Professor's Notes.*

(Discontinued September, 1927.)

Education 3. History of Education. Elective for Seniors in the A.B. and Ph.B. courses. Prerequisite: *Education 2.*

The purpose of this course is to present a survey of the development of the educational theory and practice from medieval times to the present time.

Renaissance and Reformation: in Italy, in other countries; the Catholic reaction; modern education: Realism, Realists and Theorists of the Seventeenth Century; religious organizations of the Seventeenth Century—the Psychologists, development of modern school systems in Germany, France, England and the United States.

Three hours per week for one semester.

Three semester hours credit.

Text: *History of Education, Monroe.*

(Discontinued September, 1927.)

Education 4. Practical Introduction to Teaching. Elective for Seniors in the A.B. and Ph.B. courses. Prerequisite: *Education 3.*

Principles of psychology in teaching; temperaments; educational psychology; educational principles and their applications; theory; class management including (1) a study of the teacher's task; (2) appreciation of individual pupil; (3) means of gaining interest and attention; (4) methods of presentation; (5) drill; (6) direction of study; (7) suggestions for meeting the needs of individual pupils; (8) supervised study; (9) plans for the organization of class work; (10) hints for securing economy and efficiency in class work; (11) faults in teaching and remedies for same; (12) examinations, credits, and promotions. Demon-

strations in teaching are required and points of criticism offered. The aim is to make the work as practical as possible.

Three hours per week for one semester.

Three semester hours credit.

Text: *Professor's Notes*.

(Discontinued September, 1927.)

Education 5. History of Education. Elective for Juniors in the A.B. and Ph.B. courses.

The purpose of this course is to promote a clearer understanding of modern tendencies in education by a careful study of the problems, practices, and ideals of the past.

Scope: Educational agencies in ancient times, in the "Classical Age," in the Middle Ages and during the Renaissance; the growth of national systems of popular education; recent attempts to adjust curricula to the growing complexities of civilization with special emphasis on the present-day trend of the American school system.

Six hours per week for one semester.

Six semester hours credit.

Texts: *The History of Education, Cubberly.*

The History of Education, McCormick.

(Discontinued September, 1928.)

Education 6. The Learning Process. Elective for Juniors in the A.B. and Ph.B. courses.

The purpose of this course is to acquire a working knowledge of those fundamental elements of psychology that relate to the educative process.

Scope: A systematic study of the educable being, the laws that govern his physical and mental development, his relation to the spiritual, social, economic and cultural aspects of life and the significance of the whole in respect to classroom procedure.

Six hours per week for one semester.

Six semester hours credit.

Text: *Psychology for Students of Education, Gates.*

(Discontinued September, 1928.)

Education 7. Directing the Learning Process. Elective for Seniors in the A.B. and Ph.B. courses.

The purpose of this course is to give the student a clear concept of the principles that govern the art of classroom management so that he may better direct and stimulate pupil activities.

Scope: A brief review of the salient characteristics of the learning process; consideration of general and specific objectives; direction of habit formation and right conduct; aids to the acquisition and use of knowledge; recognition and treatment of individual differences; provision for extra-curricular activities and the measurement of achievement; group instruction in special methods, supplemented by thirty hours of outside observation and practice teaching.

Six hours per week for one semester.

Six semester hours credit.

Texts: *Directing Learning in the High School, Monroe.*

An Introduction to High School Teaching, Colvin.

(Discontinued September, 1928.)

Education 8. Principles of Education. Elective for Seniors in the A.B. and Ph.B. courses.

The purpose of this course is to give to the prospective teacher a comprehensive philosophy of education with which to evaluate objectives and methods.

Scope: A consideration of education in its broad and restricted senses, its possibility and necessity, the need of formal education, the psychological foundations that tend to modify its administration, the relation that education bears to the home, to health, to civic life to vocation, recreation and religion; the function of the school as an agency of education and the conduct of instruction.

Six hours per week for one semester.

Six semester hours credit.

Text: *Principles of Education, Chapman and Counts.*

Philosophy of Education, Shields.

(Discontinued September, 1928.)

Education 9. The History of Education. Elective for Juniors in the A.B. and Ph.B. courses.

The purpose of this course is to promote a clearer understanding of modern tendencies in education by a careful study of the problems, practices and ideals of the past.

Scope: Educational agencies in ancient times, in the Classical Age, in the Middle Ages, and during the Renaissance; the growth of national systems of popular education; recent attempts to adjust curricula to the growing complexities of civilization with special emphasis on the present-day trend of the American school system.

Two hours per week for two semesters.

Four semester hours credit.

Texts: *The History of Education, Cubberly.*

History of Education, McCormick.

Assistant Professor POWERS.

Education 10. Ethics of the Teaching Profession. Elective for Juniors in the A.B. and Ph.B. courses.

The purpose of this course is to inculcate worthy ideals and establish norms of conduct in teacher-relationships.

Scope: Survey of the teacher's status in formal systems of education; consideration of legal and moral rights and responsibilities; ethical attitudes towards school officials, parents and pupils; causes of failure; professional advancement; and the use of leisure time.

Two hours per week for two semesters.

Four semester hours credit.

Assistant Professor POWERS.

(Not to be offered 1930-1931.)

Education 11. English for Teachers. Elective for Juniors in the A.B. and Ph.B. courses.

The purpose of the course is to cultivate habits of refined speech and to foster reverence for literary ideals.

Scope: Practice in oral and written expression; creative and appreciatory work in prose and poetry; attention to detail in matters affecting personality, skill, charm and forcefulness in the development of appropriate language habits.

Two hours per week for two semesters.

Four semester hours credit.

Professor AHERN.

Education 12. Educational Psychology. Elective for Seniors in the A.B. and Ph.B. courses.

The purpose of this course is to acquire a working knowledge of those fundamental elements of psychology that relate to the educative process.

Scope: The course embraces a systematic study of the educable being, his native and acquired tendencies; economy in learning; the process of acquiring ideas and ideals; general intelligence and its measurements; significance of the whole in respect to classroom procedure.

Two hours per week for two semesters.

Four semester hours credit.

Text: *Psychology for Students of Education, Gates.*

Professor O'GORMAN.

Education 13. General Methods of Teaching. Elective for Seniors in the A.B. and Ph.B. courses; will be opened to Juniors in September, 1930.

The purpose of this course is to give the student a clear concept of the principles that govern teaching procedure so that he may better direct and stimulate learning activities.

Scope: A brief review of the salient characteristics of the learning process; consideration of general and specific objectives; direction of habit formation and right conduct; aids to the acquisition and use of knowledge; recognition and treatment of individual differences; measurement of achievement; analysis and interpretation of results.

Two hours per week for two semesters.

Four semester hours credit.

Texts: *Directing Learning in the High Schools*, Monroe.

An Introduction to High School Teaching, Colvin.

Professor O'GORMAN.

Education 14. Principles of Education. Elective for Seniors in the A.B. and Ph.B. courses.

The purpose of this course is to give to the prospective teacher a comprehensive philosophy of education with which to evaluate objectives and methods.

Scope: A consideration of education in its broad and restricted senses, its possibility and necessity; the need of formal education, the psychological foundations that tend to modify its administration; the relation that education bears to the home, to health, to civic life, to vocation, recreation and religion; the function of the school as an agency of education; and the conduct of instruction.

Two hours per week for two semesters.

Four semester hours credit.

Texts: *Principles of Education*, Chapman and Counts.

Philosophy of Education, Shields.

Professor O'GORMAN.

Education 15. Special Methods in English. Elective for Seniors and Juniors taking Education.

The purpose of this course is to aid those who intend to specialize in the teaching of English.

Scope: A detailed study of the aim and content of an approved course of English in secondary schools; methods of teaching oral and written expression; principles of appreciation, memory and review as they relate to English literature; practice in working out lesson plans for specific assignments in English.

Two hours per week for one semester.

Two semester hours credit.

Text: *Professor's Notes*.

Assistant Professor McCANN.

Education 16. Special Methods in French. Elective for Seniors and Juniors taking Education.

The purpose of this course is to acquaint those who are preparing to teach French with the aim, scope and technique of French courses offered in approved high schools.

Scope: A comparative study of the direct, indirect and combined methods of teaching French; review of standard literary works used in high school; practice in creating appropriate classroom atmosphere by the introduction of historical and geographical projects growing out of the work under consideration; emphasis on the acquisition of an easy conversational manner through the constant use of French in all class activities.

Two hours per week for one semester.

Two semester hours credit.

Text: *Professor's Notes.*

(Not offered 1929-1930.)

Education 17. Special Methods in Mathematics. Elective for Seniors and Juniors taking Education.

The purpose of this course is to introduce the student to some of the problems and practices current among teachers of mathematics in Senior and Junior High Schools.

Scope: The course includes a brief analysis of the objectives and content material in Algebra, Geometry and Trigonometry based on the report of the National Committee on Mathematical Requirements. Considerable time is devoted to reports and discussions of such questions as "minimum essentials," "enrichment," "differentiated assignments," "individualized instruction," and "diagnostic testing." Opportunity is provided for reviewing much of the subject matter and for observing actual teaching conditions.

Two hours per week for two semesters.

Four semester hours credit.

Assistant Professor POWERS.

Education 18. Special Methods in History. Elective for Seniors and Juniors taking Education.

The purpose of this course is to aid those who intend to specialize in the teaching of History.

Scope: A brief survey of the field of History; a compilation of data relating to text, laboratory and source material; theory and practice in planning appropriate learning exercises; a study of the technique of the quiz, the topical recitation, the project and problem as they apply to the

teaching of History; the use and abuse of standard tests and measurements.

Two hours per week for one semester.

Two semester hours credit.

Text: *The Teaching of History in Senior and Junior High School*, Tryon.

Professor O'GORMAN.

Education 19. Special Methods in Physical Education. Elective for Seniors and Juniors taking Education.

The aim of this course is to develop skill in prospective teacher-athletic coaches and physical training directors.

Scope: Demonstration and practice in handling groups in the gymnasium; techniques of directing floor drill, apparatus work and indoor sports; correct evaluation of the principles involved in recreative exercises, muscle control and sportsmanship through oral and written discussions.

Two hours per week for one semester.

Two semester hours credit.

Physical Director SULLIVAN.

Education 20. Practice Teaching and Observation.

Seniors in the department of education are required to spend from thirty to sixty hours in the classroom of an approved secondary school. Evidence of a satisfactory professional attitude and successful class management must be attested to by the principal of the co-operating school before credit is allowed.

One semester hour credit.

Education 21. Special Methods in Latin. Elective for Seniors and Juniors taking Education.

The purpose of this course is to aid those who intend to specialize in the teaching of Latin.

Scope: A brief review of the mechanics of Latin grammar, application of principles of syntax in the composition of themes; practice in reading the better known Latin writers.

Two hours per week for one semester.

Two semester hours credit.

(Not offered 1929-1930.)

Education 22. History of Education, Theory and Practice.

A general survey of the history of education from ancient times through the present-day trend of the American School System, with special emphasis given to the important epochs and movements and their influence on the evolution of educational theory and practice.

Theory and Practice: a course in the theory and principles of education with practical application in classroom management.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *History of Education, Monroe.*

Theory and Practice: Professor's Notes.

(Discontinued September, 1925.)

Education 23. High School Supervision. Elective for Seniors in the A.B. and Ph.B. courses.

Purpose: To help students to acquire a perspective of the entire field of high school endeavor; to view the component parts in their relation to the system as a whole.

Scope: A critical study of the 8-4, 6-3-3, and 6-6 plans of organization; a review of the general fields of knowledge and the program of studies; departmental teaching; methods and materials of instruction; enrichment and advancement; records and reports; extra-curricular activities—their place and purpose.

Two hours per week for one semester.

Two semester hours credit.

Text: *The Principal and His School, Cubberly.*

Professor O'GORMAN.

Education 24. Educational Measurements. Elective for Seniors in the A.B. and Ph.B. courses.

Purpose: To give the student a ready, working knowledge of the character, extent and value of objective measuring devices in education and to acquaint him with various techniques of their administration.

Scope: The nature of educational measurements; characteristics of a good test; principles of test-construction; norms of pupil achievement in secondary school subjects; statistical methods of handling data; interpretation of results.

Two hours per week for one semester.

Two semester hours credit.

Text: *The Theory of Educational Measurements, Monroe.*

Professor O'GORMAN.

SOCIOLOGY

Assistant Professor DONOGHUE

Sociology 4. Theoretical Sociology, Social Ethics and Social Pathology. Elective for Juniors and Seniors in the A.B. and Ph.B. courses.

Three hours per week for two semesters.

Six semester hours credit.

Texts: *Introductory Sociology, Muntsch and Spaulding.*

Social Problems and Agencies, Spaulding.

An Introduction to Social Work, O'Grady.

Assistant Professor DONOGHUE.

PHOTOGRAPHY

Photography 1. This course is elective for all students in the A.B., Ph.B. and B.S. courses.

The lectures are supplemented by demonstrations before the class. Opportunities are afforded the students to do practical work in the taking, developing, printing, mounting, and enlarging of photographs, and in the making and coloring of lantern slides.

Outline: brief outline of the history of Photography; the principles of Chemistry and Physics underlying Photography; types of lenses; types of cameras; exposure; developers; the dark room and the furniture; the art of development, the negative; the positive, printing the picture; types of photographic papers; retouching, mounting, and coloring photographs; enlargements; the making and coloring of lantern slides; motion picture photography; aeroplane and airship photography; color photography; color printing.

The college has a completely equipped dark-room in which the practical instruction will be given in all the processes indicated in the above outline.

One hour per week for twenty-five weeks.

No college credit given.

Professor AHERN.

RELIGION

Professors BRENNAN, GILLERAN, MEAGHER, MICHAUD, MORAN, MORIARTY, MULLIGAN, O'BRIEN and SMITH.

Assistant Professors GRAHAM, J. MURPHY, O'KEEFE, SHEA and WELCH:

Religion 1. Fundamental Apologetics. Required of Freshmen in the A.B., B.S. and Ph.B. courses.

Two hours per week for one semester.

Text: *Defence of the Catholic Church, Doyle.*

Professors BRENNAN and MORAN.

Religion 2. The Church and God. Required of Freshmen in the A.B., B.S. and Ph.B. Courses.

Two hours per week for one semester.

Text: *Defence of the Catholic Church, Doyle.*

Professors BRENNAN and MORAN.

Religion 3. Creation and Redemption. Required of Sophomores in the A.B., B.S. and Ph.B. courses.

Two hours per week for two semesters.

Text: *God and Creation, Chetwood.*

Professors GILLERAN, MEAGHER, MICHAUD, MORIARTY, SMITH and Assistant Professor O'KEEFE.

Religion 4. Redemption. Required of Juniors in the A.B., B.S. and Ph.B. courses.

Two hours per week for two semesters.

Text: *God, the Redeemer, Herzog.*

Assistant Professors GRAHAM, J. MURPHY, SHEA and WELCH.

Religion 7. Review Course. Required of Seniors in the A.B., B.S. and Ph.B. courses.

Two hours per week for two semesters.

Text: *The Catholic's Ready Answer, Hill.*

Professor MULLIGAN.

GRADUATE COURSE IN CHEMISTRY

The Graduate Course in Chemistry, leading to the degree of Master of Science in Chemistry, is administered by the Committee on Graduate work, which consists of the President and Dean of the College and the Dean of the Chemistry Department.

Instituted in 1926, this course aims to give to men of college or technical training a broader and deeper acquaintance with the science of Chemistry and methods of research in this field.

ADMISSION AND FEES

Admission to this course is opened only to candidates who hold Bachelors' degrees from approved colleges and technical schools and who, in their college or technical courses, have completed courses in Inorganic, Analytic, Organic and Physical Chemistry.

All candidates for admission to this course must file their applications with the Dean of the Chemistry department on or before August 1. In support of his application each candidate should forward for approval a complete transcript of his college record (not required of graduates of Holy Cross College) and two letters of recommendation from Professors of Chemistry under whose direction he completed work in Chemistry. Application blanks may be obtained from the Assistant Dean of the Chemistry Department.

The tuition in the Graduate Course in Chemistry is \$300.00. In addition to the tuition fee, the other expenses incurred are as follows: registration fee, (\$5.00); graduation fee, (\$10.00) and expenses for books. Each student in the Graduate Course in Chemistry is obliged to deposit \$50.00 as a deposit against breakage.

All graduate students will be required to room in the City of Worcester. Adequate accommodations may be obtained near to the college campus. Expenses for room and board for the entire year should not exceed \$600.00.

REQUIREMENTS FOR DEGREE OF MASTER OF SCIENCE

The ordinary requirement for the master's degree in Chemistry consists of one full year of study, devoted to advanced work, including the preparation of a thesis. To be recommended for the master's degree, each candidate must present a thesis on a topic related to his major subject which shall include the results of original research and evidence of high scholarship. He must also pass a Public Examination conducted by the Dean of the Chemistry Department, the professors in this department and such other members of the Faculty as the Committee on Graduate work may appoint.

Fees and Expenses

TUITION—FEES

The general tuition fee, which includes Library, Athletic, Eclectic Lecture, Registration and all other incidental fees, for every student in regular standing in Holy Cross College for the academic year, the period between the opening of the College Year and Commencement, is *two hundred and eighty dollars*; but if a student in the College takes work in excess of the amount required of members of his class, he is charged an additional fee of *thirty-five dollars* for each additional full-year course or *twenty dollars* for each additional half-year course so taken.

A student who enters the College after the beginning of the academic year is charged from the beginning of the tuition period in which he enters. A student who leaves the College during the academic year is charged to the end of the tuition period in which he leaves, provided that before that time he gives written notice to the Dean of his withdrawal; otherwise he will be charged to the end of the academic year or to the end of the tuition period in which such notice is given. The first tuition period begins at the beginning of the academic year and ends November 14, the second tuition period begins November 15 and ends February 2; the third tuition period begins February 3 and ends March 26; the fourth tuition period begins March 27 and ends at Commencement.

Deductions from tuition fees paid for additional courses may be claimed by students who have properly notified the Dean of their withdrawal from such courses. Deductions are made in accordance with the tuition period in which notification is received.

A fee of five dollars is charged for each examination for the removal of a condition; *a fee of three dollars* is charged for each examination for the removal of an absent mark.

Every candidate for a degree is charged a graduation fee of *ten dollars* and he is liable for payment of this fee unless he fails

in his Senior examinations or gives written notice to the Dean before May 1 of his graduating year that he withdraws his candidacy.

FEES FOR SINGLE COURSES

Special Students. Students not candidates for degrees, instead of paying the annual tuition fee, may pay fees for the courses which they take. No deductions for absence or withdrawal is made from the fees for single courses. Each Special Student who attends a course for only a part of the year must pay the whole fee for this course. However, a student who is liable for the annual tuition fee is entitled to the same remission as a student in regular standing.

Special students, not liable for the annual tuition fee, if they wish all the academic and athletic privileges of students in regular standing, are required to pay, *in addition to single course fees*, an annual fee of *eighty dollars* (\$80.00).

The tuition fees for single courses are as follows:

For any course not a laboratory course, *thirty-five dollars* for a full-year course; *twenty dollars* for a half-year course.

For a laboratory course, *twenty-five dollars* for a full-year course; *fifteen dollars* for a half-year course.

For any course including both lectures and laboratory, *sixty dollars* for a full-year course; *thirty-five dollars* for a half-year course.

FEES FOR LATE REGISTRATION

A student who fails to register at the appointed time for any course, unless granted late registration permission by the Dean, is required to pay the Treasurer a fee of *five dollars*. A fee of *five dollars* is charged for changes in elective courses.

LABORATORY AND OTHER FEES

Each student taking a laboratory course is liable for breakage, damage and loss of apparatus. Students in regular standing and special students liable for the annual tuition fee of two hundred and eighty dollars are charged, in addition, fees for each laboratory course which they take. Students in regular standing in both Junior and Senior classes, electing for degree credits courses other than laboratory courses, are obliged to pay fees amounting to *ten dollars* for these courses.

The laboratory fees are as follows:

Physics 1, 3, \$20.00 each; Physics 2, 4, 5, 6, 7, \$15.00 each.

Biology 3, \$25.00; Biology 4, 6, 10, 11, 12, \$15.00 each.

Chemistry 1, 6, 11, \$15.00 each; Chemistry 2, \$25.00; Chemistry 8, 9, 13, 14, \$20.00 each; Chemistry 5, 7, \$25.00 each.

The deposits against breakage required for each course in Chemistry are as follows:

Chemistry 1, 6, 11	\$15.00 each
Chemistry 2	\$15.00
Chemistry 8, 9, 13, 14	\$15.00 each
Chemistry 5	\$35.00
Chemistry 7	\$15.00

The above deposits are refundable providing all equipment is returned in condition in which given.

BOARD, ROOM AND OTHER EXPENSES

The necessary expense of residence at the College, *including board, private room (furnished), service and attendants*, is \$445.00; the necessary expense of residence at the College, *including board, dormitory space, service and attendants* is \$370.00. In addition to these charges, for which every one must plan, a student's expenses will include charges which vary with the means and habits of the individual, for example, books and stationery, clothing, membership in societies and the expenses of vacations.

Deductions from money paid for board and room may be claimed by students who have properly notified the Dean of their withdrawal from the College. Deductions are made in accordance with the tuition period in which such notification is received.

PAYMENT OF COLLEGE BILLS

The first bill will be issued on September 2 and payable on the day of registration. It will include one-half of the expenses for tuition, board and room.

The second bill will be issued on November 3 and payable before December 3. It will include the fees for Chemistry,

Physics and Biology and all other charges incurred to November 1.

The third bill will be issued on January 14 and payable before February 4. It will include one-half of the expenses for tuition, board and room, graduation fee (for Seniors only) and all other miscellaneous charges to January 15.

The final bill will be issued on March 14 and payable before April 1 and will include all miscellaneous charges incurred to March 14.

Bills for all other miscellaneous charges from March 14 to Commencement will be issued at the time the indebtedness is incurred.

Deferred payment of bills can be sanctioned only by the President of Holy Cross College. For such concession a delayed payment fee of two dollars per month (\$2.00) will be added to the accounts unpaid.

ESTIMATE OF ANNUAL EXPENSES

I. Student occupying private room with roommate	
<i>Tuition</i>	\$280.00
<i>Board and room rent, including heat and service</i>	445.00
<i>Text-books and laboratory expenses</i>	50.00
	<hr/>
<i>Total</i>	\$775.00

Does not include outlay for clothes and traveling or other strictly personal expenses.

II. Students occupying dormitory space:	
<i>Tuition</i>	\$280.00
<i>Board and dormitory space, including heat and service</i>	370.00
<i>Text-books and laboratory expenses</i>	50.00
	<hr/>
<i>Total</i>	\$700.00

Does not include outlay for clothes and traveling or other strictly personal expenses.

Scholarships

While other institutions number their scholarships by hundreds, and the value of them may be estimated at millions of dollars, Holy Cross is able to offer very few. These she names with grateful benedictions on the heads of those who have bestowed them. They are:

The Governor Ames Scholarship. (Income on \$1,000).
Founded in 1887 by ex-Governor Oliver Ames.

The Rev. Charles E. Burke Scholarship.—(Income on \$3,000).
Founded in 1895. Annual appointment to be made from residents of St. Francis Parish, North Adams, Mass.

The Thomas Callaghan Scholarship.—(Income on \$2,000).
Founded in 1914 by the late Thomas Callaghan of Leicester, Mass., limited to residents of Worcester County, "preference to be given to those preparing for the priesthood."

The Connecticut Valley Alumni Scholarship.—(Income on \$1,725.)
Founded in 1912 by the Alumni of Connecticut Valley.

The Rt. Rev. Monsignor Daniel F. Curtin Scholarship.—(Income on \$10,000).
Founded in 1921 by the Rt. Rev. Monsignor Daniel F. Curtin, Glens Falls, N. Y., to be appointed by the pastor of St. Mary's Church, Glens Falls, N. Y.

The "In Memory of David Goggin" Scholarship.—(Income on \$1,000).
Founded in 1925 by Mrs. Catherine M. Goggin, in memory of David Goggin. Preference to be given relative.

The Monsignor Griffin Scholarship.—(Income on \$1,000).
Founded in 1895, limited to residents of St. John's Parish, Worcester, Mass.

The John H. Halloran Scholarship I.—(Income on \$12,000). Founded in 1909 by Mr. John H. Halloran of New York, as a memorial of his brother, the late William J. Halloran, of Worcester, competition open to the country. Will be opened in September 1933.

The John H. Halloran Scholarship II.—(Income on \$12,000). Founded in 1921 by Mr. John H. Halloran of New York, as a memorial of his brother, the late William J. Halloran of Worcester. Selection to be made from the students of the public and parochial schools of Northampton, Mass., by means of competitive examination. Will be opened in September, 1933.

The Rev. Jeremiah J. Healy Scholarship I.—(Income on \$1,500). Founded in 1912 by the Rev. Jeremiah J. Healy, of Gloucester, Mass., for a candidate for the priesthood worthy of financial aid.

The Rev. Jeremiah J. Healy Scholarship II.—(Income on \$1,500). Same as the Rev. Jeremiah J. Healy Scholarship I.

The Richard Healy Scholarship.—(Income on \$8,000). Founded in 1908 by Mr. Richard Healy of Worcester, open to competition for residents of Worcester County, regardless of creed.

The Mr. and Mrs. Richard Healy Scholarship.—(Income on \$12,000). Founded in 1916 by Mr. and Mrs. Richard Healy of Worcester, for benefit of direct relative of donors.

The Rev. Frederick W. Heaney, S.J., Scholarship.—(Income on \$2,500). Founded in 1920 by Miss Lillian Heaney, in memory of her deceased brother, the Rev. Frederick W. Heaney, S.J.

The "In Memoriam" Scholarship.—(Income on \$8,000). Founded in 1915 by an alumnus of the Collège for a deserving student.

The Rev. Michael H. Kittredge Scholarship.—(Income on \$5,000). Founded in 1917 by Rev. Michael H. Kittredge, '75.

The John J. Leonard Scholarship of the M. C. O. F.—(Income on \$6,000). Founded in 1926 and restricted to members, or sons of members of the M. C. O. F., selection to be made by competitive examination.

The Henry Vincent McCabe Scholarship.—(Income on \$5,000). Founded in 1916 by the late Mary McCabe of Providence, R. I., for a deserving student.

The Rev. David F. McGrath Scholarship I.—(\$6,000). Founded in 1907 by the Rev. David F. McGrath, '70, providing board, tuition and room for the entire course, beneficiary to be selected by competitive examination. Restricted to graduates of St. Mary's Parish School, Milford, Mass., if there be more than one eligible candidate. If but one such, graduates of Milford Public High School may be admitted to competition; if but one candidate from both schools combined, anyone otherwise eligible in the State to be admitted to competition.

The Rev. David F. McGrath Scholarship II.—(\$6,000). Founded in 1909 by the Rev. David F. McGrath, '70, providing board, tuition and room for the entire course, conditions same as the Rev. David F. McGrath Scholarship I.

The Rev. David F. McGrath Scholarship III.—(\$8,000). Founded in 1920 by the Rev. David F. McGrath, '70, providing board, tuition and room for the entire course, conditions same as the Rev. David F. McGrath Scholarship I.

The Patrick J. Murphy Scholarship.—(Income on \$1,500). Founded in 1914 by Mrs. Ellen M. Murphy, as a memorial to her husband, the late Patrick J. Murphy, Worcester, Mass.

The O'Driscoll Scholarship.—(Income on \$3,000). Founded in 1874, entitling two students to \$60.00 per year each, limited to residents of the City of Worcester, who are candidates for the priesthood and selected by the Bishop of Springfield or his delegate.

The Rev. Daniel H. O'Neill Scholarship I.—(Income on \$1,000). Founded in 1895, limited to residents of St. Peter's Parish, Worcester, Mass.

The Rev. Daniel H. O'Neill Scholarship II.—(Income on \$1,500). Founded in 1908, limited to residents of the City of Worcester.

The Rev. Dr. Patrick B. Phelan Scholarship I.—(\$8,000). Founded in 1917 by Rev. Dr. Patrick B. Phelan, '69, for board, tuition and room for the entire course, open to competition for graduates of the Sacred Heart School, Holyoke, Mass.

The Rev. Dr. Patrick B. Phelan Scholarship II.—(\$8,000). Same as Rev. Dr. Patrick B. Phelan Scholarship I.

The Rev. John J. Power Scholarship.—(Income on \$1,500). Founded in 1907 by the late John J. Power, D.D., limited to residents of St. Paul's Parish, Worcester, Mass.

The "Quid Retribuam" Scholarship.—(Income on \$8,000). Founded in 1907 by a Friend of Education in gratitude for Divine favors; placed at the disposal of Rev. T. E. Murphy, S.J., and if not filled by him, competitive examinations will be held.

The John Reid Scholarship.—(Income on \$1,500). Founded in 1894, limited to residents of Worcester.

The Reilly Memorial Scholarship.—(Income on \$1,000). Founded in 1922 by Joseph Reilly.

The Rev. William H. Rogers Scholarship.—(Income on \$10,000). Founded in 1918 by Rev. William H. Rogers, '68.

The Hon. John E. Russell Scholarship.—(Income on \$1,500.) Founded in 1907 by a Friend of the College.

The Dr. Eugene E. and Alice K. Sullivan Scholarship.—(Income on \$2,000). Founded in 1920 and open to competition among deserving students of the City of Worcester.

The Rev. Robert Walsh Scholarship.—(Interest on \$1,000). Founded in 1895, limited to residents of the Immaculate Conception Parish, Worcester, Mass.

The Stephen V. Duffy Scholarship I.—(Income on \$6,000). Founded in 1928 by Mr. Stephen V. Duffy of Brooklyn, N. Y., for the benefit of a worthy student, selected by the President of the College, from the Borough of Brooklyn, N. Y.

The Stephen V. Duffy Scholarship II.—(Income on \$6,000). Founded in 1928 by Mr. Stephen V. Duffy of Brooklyn, N. Y., for the benefit of a worthy student, selected by the President of the College, from the Borough of Brooklyn, N. Y.

The Maurice Connor Memorial Scholarship.—(Income on \$16,000). Founded in 1929 by Mr. John T. Connor in memory of his brother, Maurice. The intention of the donor is to provide for one boy board, room, tuition and fee charges as far as the income will provide them. The single beneficiary is to be chosen by the Pastor of St. Mary's Church, Westfield, Mass.

The Warren Joseph Hurley Scholarship.—(Income on \$5,000). Founded in 1929 by Mrs. Jeremiah J. Hurley in memory of Warren Joseph Hurley, ex '29, for the benefit of one or more worthy students aspiring to the priesthood. Selections to be made by the President of the College.

All future scholarships will be accepted with the understanding that the income from the sum will be the amount applicable to the holder of the scholarship.

It is hoped that, in time, other generous friends of the college may be inspired to found at least partial scholarships and thus enable the Faculty, in answer to numerous appeals from deserving students, to make reductions for board and tuition. Thus the interests of education and charity could be made to go hand in hand and the future success of many a promising young man's career would be assured. Fifteen thousand dollars will found a scholarship providing tuition, board and lodging with furnished room and attendance. Five thousand dollars will found a scholarship giving free tuition.

Another method of assisting both Faculty and students is the foundation of medals and other prizes. The gift of \$500 or \$600 will found a medal in perpetuity and the founder's name will be perpetuated in the annual catalogues. It is hardly possible to conceive a more effectual way of perpetuating the memory of a benefactor than this foundation of college prizes and scholarships. The name of the benefactor will be annually recalled as long as the college survives, and unborn generations of beneficiaries will bless the memory of the benefactors.

FELLOWSHIPS

Graduate Fellowships in Chemistry. The College established in 1926, six graduate fellowships in Chemistry, each fellowship carrying a stipend of \$1000. They are offered to graduates of colleges and technical schools who are properly qualified to undertake graduate work.

Commencement Programme

WEDNESDAY, JUNE 18, 1930

OVERTURE—Zampa *Herold*

SALUTATORY

God—The First Cause

JOHN A. LANGFORD

FIRST ORATOR

God—The Supreme Architect

JOHN A. KEANEY

SECOND ORATOR

God—The Supreme Law-Giver

GEORGE A. McLAUGHLIN

INTERMEZZO *Selected*

CONFERRING OF DEGREES

VALEDICTORY

God—The Last End

MAURICE A. FITZGERALD

ADDRESS

HIS EXCELLENCY FRANK G. ALLEN

RECESSIONAL *The Purple*

Degrees Conferred

HONORARY DEGREES

Doctor of Laws

Benedict Fitzpatrick	New York, N. Y.
Rev. Lorenzo C. McCarthy, O.P.	Providence, R. I.

Doctor of Literature

Claude G. Bowers	New York, N. Y.
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DEGREES IN COURSE

Master of Science

Anthony G. Carroll, S.J.	Worcester, Mass.
Edward S. Hauber, S.J.	Worcester, Mass.
Edward S. Matelis (<i>cum laude</i>)	Baltimore, Md.
Brendan F. McSheehy (<i>magna cum laude</i>) ..	Whitinsville, Mass.
Joseph J. Molloy, S.J. (<i>cum laude</i>)	Worcester, Mass.
John M. Youel	Huron, S. D.

Bachelor of Arts

Joseph P. Alishausky	Waterbury, Conn.
James E. Arnold	Peabody, Mass.
Roland R. Aucoin	Spencer, Mass.
Eugene A. Barrett, Jr.	Philadelphia, Pa.
Gerard T. Baxter	Brooklyn, N. Y.
Leonard M. Bertsch	Akron, Ohio
John J. Birch	Worcester, Mass.
Roger A. Booth	So. Berwick, Me.
Thomas E. Bôwes (<i>cum laude</i>)	Worcester, Mass.
Luke H. Boyd	Jamestown, N. Y.
William B. Brennan	New York, N. Y.
Hugh F. Broderick, Jr.	Swampscott, Mass.
John J. Brosnan, Jr.	Worcester, Mass.
Leo J. Burke	Worcester, Mass.
Henry J. Butkiewicz (<i>cum laude</i>)	Worcester, Mass.
Raymond F. Campbell	Worcester, Mass.
Francis E. Carey (<i>cum laude</i>)	Lowell, Mass.
Francis J. Carey (<i>cum laude</i>)	Milton, Mass.
Thomas H. Casson	Flushing, N. Y.

William J. Chapitis (<i>cum laude</i>)	Rumford, Me.
Stuart J. Clancy	Branford, Conn.
Joseph B. Collins	Worcester, Mass.
Eugene S. Conlin	Worcester, Mass.
Joseph A. Conlon	Worcester, Mass.
Robert E. Connell	Jersey City, N. J.
Thomas G. Connelly	Brighton, Mass.
Francis X. Conway (<i>magna cum laude</i>)	New York, N. Y.
Leroy J. Conway	Leicester, Mass.
John J. Costello	Boston, Mass.
Patrick J. Costello	Portland, Me.
Edward W. Cotter	Concord, N. H.
William E. Cotter	Worcester, Mass.
Thomas F. Crimmins, Jr.	Brooklyn, N. Y.
Edmund J. Croce (<i>magna cum laude</i>)	Worcester, Mass.
Daniel J. Cronin, Jr.	Springfield, Mass.
Ralph T. Cross	Jamaica, N. Y.
John J. Crowley (<i>cum laude</i>)	Lynn, Mass.
Bernard A. Cullen	Hamilton, Mass.
Thomas A. M. Cullum	Jersey City, N. J.
Leo G. Cyr	Limestone, Me.
James S. Daley	Lowell, Mass.
Frank P. D'Apice	Yonkers, N. Y.
David I. Davoren	Milford, Mass.
John S. Dawson	Holyoke, Mass.
Daniel J. DeCourcy, Jr.	Lawrence, Mass.
Edward P. Derwin	Waterbury, Conn.
Louis A. Desnoes	Kingston, Jam., B. W. I.
Robert E. Devine	Providence, R. I.
William L. Dolan	Adams, Mass.
Cornelius F. Donahue, Jr.	Manville, R. I.
Leamon F. Donahue (<i>cum laude</i>)	Bartlett, N. H.
Paul J. Donahue	Worcester, Mass.
Francis X. Donlon	Saugerties, N. Y.
John J. Donohue	Worcester, Mass.
Joseph C. Dougherty	Chester, Pa.
Thomas L. Dougherty	Waterbury, Conn.
John E. Dowd	Worcester, Mass.
Charles E. Downs	Fall River, Mass.
James J. Doyle (<i>cum laude</i>)	New York, N. Y.
Patrick A. Doyle	Springfield, Mass.
Raymond J. Doyle	Oriskany Falls, N. Y.
Thomas M. Dunn	Springfield, Mass.
John G. Dwyer	Lowell, Mass.
Joseph M. Eagan	Worcester, Mass.

Commencement Programme

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Alfred E. Ehrhardt (<i>cum laude</i>)	Passaic, N. J.
Paul J. Eiserloh	Lowell, Mass.
John A. Evers	Paterson, N. J.
Timothy M. Feeny	Medford, Mass.
Bernard F. Finn	Jersey City, N. J.
Edgar F. Fish	Worcester, Mass.
Francis N. Fitzgerald (<i>cum laude</i>)	Worcester, Mass.
Joseph F. Fitzgerald	Framingham, Mass.
Maurice A. Fitzgerald (<i>summa cum laude</i>)	New York, N. Y.
Daniel F. Flavin	Rockland, Mass.
William J. Foley (<i>cum laude</i>)	Springfield, Mass.
John W. Foran	Worcester, Mass.
Stephen C. Gallahue	Dorchester, Mass.
John F. Gannon, Jr.	Pittsfield, Mass.
James J. Garrahan	Hazleton, Pa.
Edward L. Gendron	Fitchburg, Mass.
James F. Gilchrist	Taunton, Mass.
James J. Griffin	Hartford, Conn.
Francis T. Halloran	So. Boston, Mass.
John P. Harrahy	Worcester, Mass.
Francis V. Harrington	Buffalo, N. Y.
John B. Hasslinger	Naugatuck, Conn.
Stephen V. Hayes (<i>magna cum laude</i>)	New Bedford, Mass.
Fabian S. Hickey	Jersey City, N. J.
Leo J. Hoar	New London, Conn.
Francis A. Hogan	Albany, N. Y.
C. Edward Houlihan (<i>cum laude</i>)	Ware, Mass.
Clement E. Hoye	Taunton, Mass.
James J. Joyce	Worcester, Mass.
John A. Keaney	Worcester, Mass.
James J. Kelly	W. Hempstead, N. Y.
Joseph C. Kenney	New York, N. Y.
Daniel F. Kielty	Fitchburg, Mass.
John A. Langford (<i>cum laude</i>)	Springfield, Mass.
Frank L. Larkin	Carbondale, Pa.
Andrew J. Leach, Jr.	Brookfield, Mass.
James J. Lee	Worcester, Mass.
Thomas F. Lee (<i>cum laude</i>)	Danbury, Conn.
Albert E. Leland, Jr.	Worcester, Mass.
Daniel W. Lenehan	Taunton, Mass.
Raphael A. Lussier	Woonsocket, R. I.
Francis A. Lynch	Worcester, Mass.
Edward J. MacLaughlin	Manchester, N. H.
Walter A. Maggiolo (<i>cum laude</i>)	Brooklyn, N. Y.
Thomas B. Malone	Springfield, Mass.

Bartholomew G. March	Bethlehem, Conn.
John F. Martin	Worcester, Mass.
Frederick P. McAvey	Shrewsbury, Mass.
Edwin F. McCooley	Blackstone, Mass.
Donald J. McCrann	New Britain, Conn.
Joseph A. McCusker	Rockville, Conn.
John B. McDonald	Rockville Center, N. Y.
John J. McDonnell	Groveton, N. H.
Edward D. McGee	Hartford, Conn.
Henry M. McGrane	Troy, N. Y.
Francis J. McGrath (<i>cum laude</i>)	Worcester, Mass.
William A. McKenna	Worcester, Mass.
George A. McLaughlin	Edgewood, R. I.
Cornelius P. McMahon	Pittsfield, Mass.
William A. McNally	Clinton, Mass.
John W. McNamara	Clinton, Mass.
William F. McRell	Clinton, Mass.
Stephen R. Minor	Worcester, Mass.
Frederic J. Muldoon	Brighton, Mass.
Raymond F. Mullaney	Worcester, Mass.
Harold E. Mullins	Bridgeport, Conn.
John T. Mulvey	New York, N. Y.
Edward F. Murphy	No. White Plains, N. Y.
John J. Murphy	Danbury, Conn.
James M. Murtough (<i>cum laude</i>)	W. Springfield, Mass.
Charles M. Normile	Cambridge, Mass.
Martin J. Oberlander	Brooklyn, N. Y.
Donald F. O'Brien	Flushing, N. Y.
James F. O'Brien	Worcester, Mass.
Enos J. O'Connell (<i>cum laude</i>)	Thomaston, Conn.
Francis T. O'Connell	Torrington, Conn.
John D. O'Connell	Marlboro, Mass.
T. Francis O'Connor (<i>cum laude</i>)	Lawrence, Mass.
John M. O'Neill	Harrison, N. J.
Thomas V. O'Sullivan	Worcester, Mass.
James J. Powers	Worcester, Mass.
Paul M. Quinn	New York, N. Y.
Leo E. Raftery	Boston, Mass.
Robert B. Reilly	Jersey City, N. J.
James P. Reynolds	Pittsfield, Mass.
Raymond J. Richards	Hartford, Conn.
John F. Ring	Worcester, Mass.
George E. Roch	No. Grosvenordale, Conn.
William J. Roche, Jr.	Worcester, Mass.
Edward B. Ryan	Clifton, N. J.

Commencement Programme

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Edward J. Ryan, Jr.	Waterbury, Conn.
John C. Ryan	Lynn, Mass.
Jerome F. Shanahan	Forest Hills, Mass.
Timothy F. Shea	Worcester, Mass.
John D. Sheehan	Worcester, Mass.
James I. Shields	Chicago, Ill.
John A. Shorten	Richmond Hill, N. Y.
James J. Slattery	Worcester, Mass.
Harold M. Sloane	Hamden, Conn.
John R. Smith	Binghamton, N. Y.
Edward F. K. Sullivan	Philadelphia, Pa.
Eugene R. Sullivan (<i>magna cum laude</i>)	Fall River, Mass.
Gerald J. Sullivan	Worcester, Mass.
Robert J. Sullivan, Jr.	W. Hartford, Conn.
William J. Sullivan	No. Grafton, Mass.
Eugene M. Sweeney	Worcester, Mass.
John J. Timon	Worcester, Mass.
Joseph X. Trainor (<i>cum laude</i>)	Cambridge, Mass.
Joseph F. Tucker	Montclair, N. J.
Mitchell J. Valicenti (<i>magna cum laude</i>)	So. Plainfield, N. J.
Everist C. Visk	Chicago, Ill.
Leo W. Waldert	Rochester, N. Y.
Francis X. Walsh	New York, N. Y.
Thomas J. Walsh	Worcester, Mass.
Charles W. Ward (<i>cum laude</i>)	So. Norwalk, Conn.
George F. Wessell (<i>cum laude</i>)	Kenmore, N. Y.
Andrew Westhead	Worcester, Mass.
James J. White	New York, N. Y.
James G. Winsper	So. Dartmouth, Mass.

Bachelor of Science

(In Chemistry)

John A. Kendrtarvich	Worcester, Mass.
Harry J. Mackell	Philadelphia, Pa.

Bachelor of Science

(In Physics)

John K. Chenis	Worcester, Mass.
Florence F. Donoghue	Worcester, Mass.
John B. Halloran	New Bedford, Mass.
William J. Kirchner	Lanesboro, Mass.

Bachelor of Science

(General Course)

Joseph P. Wondolowski	Worcester, Mass.
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Bachelor of Philosophy

George S. Adams.....	Worcester, Mass.
Alfred W. Alzerini.....	Milford, Mass.
Thomas J. Carnicelli.....	Winthrop, Mass.
James J. Connolly.....	Salem, Mass.
Eugene A. Desautels.....	Quinebaug, Conn.
Thomas F. Farrell, Jr.....	Wilkes-Barre, Pa.
Andrew P. Fisher.....	New York, N. Y.
Alphonsus P. Gately.....	Rockville Center, N. Y.
Victor M. Gutierrez.....	Santurce, P. R.
Joseph R. Harrington.....	Arlington, Mass.
J. Frank Hassett.....	Worcester, Mass.
Eugene H. Hebert.....	Westbrook, Me.
Leon J. Hobart.....	Hitchcock, S. D.
Charles Hurley.....	Portsmouth, N. H.
Thomas F. Q. Kane.....	Hartford, Conn.
William J. Kerrigan.....	Fall River, Mass.
Harold F. Klumbach.....	New York, N. Y.
Theodore M. Kucharski.....	Exeter, N. H.
Henry U. Lawrence.....	Montague, Mass.
Edwin A. Leary.....	Arlington, Mass.
Richard G. Maas.....	Milwaukee, Wis.
William J. Madden.....	Brockton, Mass.
Alfred A. Maffeo.....	Fitchburg, Mass.
Paul J. Maguire.....	Somerville, Mass.
Anthony R. Manfreda.....	Rutland, Vt.
Francis E. McLaughlin.....	Saco, Me.
William G. Miller.....	Fitchburg, Mass.
Thomas W. Moran.....	Springfield, Mass.
David J. Murphy.....	Marlboro, Mass.
Edward K. O'Donnell.....	Salem, Mass.
Vincent P. O'Reilly.....	Worcester, Mass.
James C. Shevlin.....	Cincinnati, Ohio
Patrick M. Sweeney.....	Providence, R. I.
William F. Sweeney.....	Plattsburgh, N. Y.
Matthew R. Tierney.....	New Haven, Conn.
Richard F. Watrous.....	Brooklyn, N. Y.

DEGREES CONFERRABLE LATER

Bachelor of Arts

William G. O'Donnell.....	Bennington, Vt.
Henry J. Shanahan.....	Forest Hills, Mass.
Edward J. Weldon.....	New York, N. Y.

Bachelor of Philosophy

Edward M. Gannon.....	Syracuse, N. Y.
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Awards

JUNE, 1930.

FLATLEY GOLD MEDAL—The Flatley Gold Medal for Senior Philosophy, founded in 1890 by the late Reverend Michael F. Flatley, '65, was awarded to

MAURICE A. FITZGERALD, '30

PHILOSOPHY PRIZE—The prize for the attainment of second honors in Senior Philosophy, the gift of the College, was awarded to

FRANCIS X. CONWAY, '30

SUMMA CUM LAUDE—ARTS COURSE—The highest honor in the Arts Course was awarded to Maurice A. Fitzgerald, '30, who secured an average of 94.9%, or 1519 points out of a possible 1600 points for all of the studies of the Senior year.

BISHOP O'REILLY GOLD MEDAL—The Bishop O'Reilly Gold Medal, donated by the late Right Reverend Thomas J. Conaty, D.D., '69, Bishop of Los Angeles, in memory of Right Reverend Patrick T. O'Reilly, D.D., first Bishop of Springfield, Mass., for the highest average in Philosophy in Junior year was awarded to

FRANCIS C. NASH, '31

NUGENT GOLD MEDAL—The Nugent Gold Medal for Physics, founded June, 1894, by Reverend Edward Evans Seagrave, to perpetuate the memory of his ward, John T. Nugent, who died at the college in 1893, was awarded to

PAUL D. RIEDL, '31

BUCKHOUT MEDAL—The James A. Buckhout Gold Medal for Freshman B.S. Chemistry was awarded to

CHARLES J. MCGOEY, '33

ORATORICAL PURSES

A PURSE OF TWENTY-FIVE DOLLARS IN GOLD, for general excellence in Oratory, open for competition to all classes, was awarded to

OWEN P. MCGIVERN, '31

A PURSE OF FIFTEEN DOLLARS IN GOLD for second honors in the same competition was awarded to

EDWARD J. HIDALGO, '33

A PURSE OF FIVE DOLLARS IN GOLD for third honors in the same competition was awarded to

EDWARD B. HANIFY, '33

O'CONNOR PURSE—The Joseph J. O'Connor Purse of Forty Dollars for Debating, yielded by a permanent fund of one thousand dollars, the gift of the late Joseph J. O'Connor, of the Class of 1909, was awarded to the Freshman Debating Team,

EDWARD J. HIDALGO, EDWARD B. HANIFY and
HARRY W. KIRWIN

STRAIN MEDAL—The Strain Gold Medal, founded in June, 1877, for the best Philosophical Essay submitted during the academic year, was awarded to

FRANCIS X. CONWAY, '30

for his essay entitled "The Moral Obligation of Civil Law."

CROMPTON MEDAL—The Crompton Gold Medal, founded in August, 1875, by George Crompton, Esq., for the best Scientific Essay submitted during the school year, was not awarded.

FLAHERTY MEDAL—The Flaherty Gold Medal, founded in May, 1903, by Patrick W. Flaherty, Esq., for the best Historical Essay submitted during the academic year, was not awarded.

THE EDWARD V. KILLEEN, JR., CHEMISTRY AWARD—The Killeen Purse of Fifty Dollars in Gold for general excellence throughout the course in Pre-medical Chemistry was awarded to

EUGENE R. SULLIVAN, '30

CONNIFF PRIZE—The Conniff Prize of Twenty-five Dollars, the gift of Dr. Clement C. Maxwell of the Class of 1920, to perpetuate the memory of Rev. Philip Conniff, S.J., for the best written appreciation of Ode II, Book I, "Iam satis terris," was awarded to

JOHN T. DWIGHT, '33

REILLY MEMORIAL PURSE—The James H. Reilly Memorial Purse, founded by Joseph J. Reilly, '04, and immediate relatives, to be awarded annually to the student contributing the best short story to *The Purple*, was awarded to

CHRISTOPHER J. REYNOLDS, '33

for his story, "Oasis," published in the May issue.

DE VALERA PURSE—The De Valera Purse of Fifty Dollars, yielded by the permanent fund of one thousand dollars, the gift of Daniel H. Coakley, for the best essay on a subject taken from Irish History, was awarded to

EDWARD P. LILLY, '32

for his essay entitled, "Irish Influence on Colonial Massachusetts, 1630-1780."

McMAHON HISTORICAL PRIZES—The McMahon Historical Prizes, founded in 1927 by Reverend John W. McMahon of the Class of 1867, Pastor of St. Mary's Church, Charlestown, Mass., of Fifty, Thirty, and Twenty Dollars for the best essays on the history of the Catholic Church in New England were awarded for essays on the subject, "The Destruction of the Ursuline Convent of St. Benedict, Charlestown, Massachusetts," the first prize of fifty dollars was awarded to JOHN J. MORGAN, '31. The second prize was not awarded. The third prize was awarded to JOHN B. McDONALD, '30.

STUDENT ATHLETE MEDAL—The Student Athlete Medal, the gift of the Class of 1911, for the Student Athlete attaining the highest average during the academic year, was awarded to

HENRY U. LAWRENCE, '30

DEGREES WITH DISTINCTION

In addition to the regular pass degrees of Bachelor of Arts, Bachelor of Philosophy and Bachelor of Science, the same degrees are awarded with one or another of three grades of distinction, *cum laude*, *magna cum laude*, *summa cum laude*. The award is based only on the complete Senior year record of the student who has been in residence for two years, unless exemption is voted by the Faculty. The basis for the award of the three grades of distinction is as follows:

CUM LAUDE: A candidate for the degree of Bachelor of Arts, Bachelor of Science or Bachelor of Philosophy is awarded his degree *cum laude* if he has secured a general average of 85% or better in all subjects of his Senior year.

MAGNA CUM LAUDE: A candidate for the degree of Bachelor of Arts, Bachelor of Science or Bachelor of Philosophy is awarded his degree *magna cum laude* if he has secured a general average of 90% for all the subjects of his Senior year.

SUMMA CUM LAUDE: A candidate for the degree of Bachelor of Arts, Bachelor of Science or Bachelor of Philosophy is awarded his degree *summa cum laude* if he has secured a general average of 93% for all the subjects of his Senior year and has been awarded Final Highest Honors.

Societies and Publications

SODALITY OF THE IMMACULATE CONCEPTION

This Sodality was organized on the eighth of December, 1844, and aggregated to the Roman Prima Primaria on the tenth of April, 1846, under the patronage of St. Aloysius. The object of the Sodality is the fostering of filial devotion to the Mother of God and the practice of virtue and piety among its members.

Moderator—REV. JOHN D. WHEELER, S.J.

OFFICERS—James S. Daley, '30, *Prefect*; John J. Powers, '31, *Assistant Prefect*; Alfred E. Ehrhardt, '30, *Organist*.

DAY STUDENTS' SODALITY

This Sodality was organized as a branch of the Sodality of the Immaculate Conception in May, 1903, and was aggregated to the Roman Prima Primaria in May, 1904, under the patronage of St. Stanislaus.

Moderator—REV. WILLIAM D. SHEEHAN, S.J.

Prefect—Thomas F. Carroll, '31.

B. J. F. DEBATING SOCIETY

This Society, founded in 1846, in honor of the founder of Holy Cross College, the Right Reverend Benedict Joseph Fenwick, is essentially a debating society, aiming at the promotion of literary knowledge, the cultivation of eloquence and readiness in debate.

Moderator—REV. JOSEPH S. FLANAGAN, S.J.

OFFICERS—John F. Gannon, '30, *President*; John F. Harrington, '31, *Vice-President*; Robert D. Whitfield, '31, *Secretary*; Arthur Ward, '31, *Censor*.

PHILOMATHIC DEBATING SOCIETY

This Society, open to all students of the College, was organized for the purpose of promoting and developing the power to think logically and forcefully on one's feet, to organize a coherent and persuasive speech, and to acquire ease and grace in presentation. This Society has always maintained a standard of quality, and the results of this policy have been demonstrated in the impressive representation of the Society on Intercollegiate and Class debating teams.

Moderator—REV. JOSEPH L. MURRAY, S.J.

OFFICERS—Owen P. McGivern, '31, *President*; John A. Burke, '32, *Vice-President*; Harry W. Kirwin, '31, *Secretary*; Nicholas J. Healy, '31, *Treasurer*.

THE DRAMATIC SOCIETY

The first dramatic societies established at the College were the "Pakachoag Dramatic Club" and the "Smithsonian Ethiopian Minstrel Club," founded in 1844. In 1846 the Dramatic Club was reorganized under the former name. In 1889 the society was established on its present basis, with the chief aim to promote elocution by training the students in dramatic art. Each year classic dramas are presented with marked success.

Moderator—IRVING T. McDONALD, A.B.

OFFICERS—Joseph A. McCusker, '30, *President*; Nicholas J. Healy, '31, *Vice-President*; Paul M. Quinn, '30, *Secretary*; John A. Burke, '32, *Treasurer*; Edward J. Keenan, '31, *Business Manager*; Patrick M. Sweeney, '30, *Stage Manager*; John R. Smith, '30, *Property Manager*; Raymond O. Martin, '31, *Wardrobe Master*; John J. McGuire, '31, *Publicity Manager*.

THE MUSICAL CLUBS

The aim of these societies is the cultivation of vocal and instrumental music. Concerts are given in various cities in the East, and excellent programs of vocal and instrumental music and band concerts are given.

Moderator of Instrumental Club

REV. ARTHUR M. MICHAUD, S.J.

Moderator of Glee Club—REV. LEO F. GILLERAN, S.J.

Conductor—J. EDWARD BOUVIER, A.M.

Manager of Instrumental Club, Gerald J. Sullivan, '30; *Manager of Glee Club*, Edward J. Ryan, Jr., '30.

SCIENTIFIC SOCIETY

The Society was founded in 1908 for the purpose of giving an opportunity to the students for discussion of subjects in physics, by means of bi-weekly meetings and conferences, that could not be treated in the regular course. The membership of this Society is restricted to honor students in physics in the Junior and Senior years.

Moderator—REV. JOSEPH P. MERRICK, S.J.

OFFICERS—John B. Halloran, '30, *President*; Joseph F. Tucker, '30, *Secretary*; William L. Kirchner, *Treasurer*.

THE HOLY CROSS PURPLE

The Holy Cross Purple is a monthly magazine published by the students of the College. Its aim is to cultivate a high literary taste among the students by exercising them in both critical and creative compositions.

Moderator—REV. SIDNEY J. SMITH, S.J.

BOARD OF EDITORS—Edward K. O'Donnell, '30, *Editor-in-Chief*; James D. Sullivan, '31, *Purple Patches*; J. Russell O'Reilly, '30, *The Moon of Books*; Robert Seaman, '31, *Staff Artist*; Frank R. McGratty, '31, *Alumni Editor*; Joseph X. Trainor, '30, *Athletics*.

BUSINESS BOARD—John A. Langford, '30, *Business Manager*; James C. Auth, '31 and Joseph F. Sullivan, '32, *Assistants*.

THE TOMAHAWK

The Tomahawk, the weekly paper of the College, first appeared at the College during the academic years of 1924-1925. Its purpose is to secure a firmer bond among the undergraduates and also to serve as a nexus between the Alumni and Alma Mater, chronicling the successes of the Alumni and telling them the important happenings of the life on the Hill.

Faculty Moderator—REV. WILLIAM E. MURPHY, S. J.

EDITORIAL STAFF—Leonard M. Bertsch, '30, *Editor-in-Chief*; Daniel J. DeCourcy, '30, *Business Manager*; Richard F. Watrous, '30, *Managing Editor*; Edward P. Connolly, '31, *Tomahawk*; Edwin A. Leary, '30, *Sports Editor*; Joseph E. Houlihan, '31, *Advertising Manager*.

THE HORMONE

The Hormone is a monthly magazine edited by the Department of Chemistry. Its aim is twofold, first, an exposition of the work being accomplished in the Department; secondly, criticism of modern chemical theories.

Editor-in-Chief—REV. GEORGE F. STROHAVER, S.J.

Assistant Editors—Frederick T. Coonan, M. S. and T. Leonard Kelly, M.S.

THE STUDENT COUNSELLORS

Student Counsellor in Senior Year—REV. JOSEPH F. SULLIVAN, S.J.

Student Counsellor in Junior Year—REV. JOHN E. WELSH, S.J.

Student Counsellor in Sophomore Year—REV. JOHN D. WHEELER, S.J.

Student Counsellor in Freshman Year—REV. NEIL L. BULMAN, S.J.

The principal duty of the Student Counsellors is to direct the spiritual activities of the College and the various religious societies and sodalities, in regard to which they exercise the same

supervision as the Dean of Discipline exercises in his department.

They provide opportunities for the students to receive the Sacraments in addition to times assigned for the general student body.

They are in a special sense the friends and advisers of the students, not only in matters directly spiritual, but also material and temporal, in their studies, their social affairs, and in other intimate and personal matters as each one may wish.

One of the questions of highest importance to every college or high school graduate is the wise choice of a profession or vocation according to one's character, talents and attractions both natural and supernatural. No student with a serious outlook on life will fail to determine, well in advance of his graduation, the career which under God's providence will best assure his temporal success and his eternal happiness. In this matter the assistance of the Student Counsellors will be invaluable. Their hours will be arranged to afford ample opportunity to the students for conferring with them.

MISSION UNIT

The Holy Cross Unit of the Mission Crusade at the College was established in 1921 and relief of the Missions was first confined to donations received through the Mite Box in the Office of Discipline. In March, 1925, the unit inaugurated the envelope collection at Mass on Sundays, and since have contributed to foreign and home missions large sums of money, large quantities of Catholic papers, altar supplies, books and clothing.

Moderator—REV. JOHN D. WHEELER, S.J.

Assistant Moderator—Mr. Frank Gallagher, A.B.

HOLY CROSS SANCTUARY SOCIETY

Moderator—REV. ARTHUR B. TRIBBLE, S.J.

Master of Ceremonies—Patrick J. Costello, '30

HOLY CROSS ATHLETIC ASSOCIATION, 1929-1930

Faculty Moderator—REV. JOHN D. WHEELER, S.J.*Director of Athletics*—Cleo A. O'Donnell, '08*Assistant Director of Athletics*—Eugene F. Flynn, '22*President*—David I. Davoren, '30*Secretary*—James J. Connolly, '30*Treasurer*—Francis L. Miller*Football*—Cleo A. O'Donnell, '08, *Head Coach*; Luke Kelly, John M. Reed, ex-'05, Harry J. O'Boyle, Arthur M. Corcoran, August P. Cervini, '28, *Assistants**Baseball*—John J. Barry, ex-'10.*Basketball*—John M. Reed, ex-'05*Track*—Bartholomew F. Sullivan

College Directory

1929 - 1930

M.S. COURSE IN CHEMISTRY

Carroll, Anthony G., S.J.
 Hauber, Edward S., S.J.
 Matelis, Edward S., B.S.
 McSheehy, Brendan F., A.B.
 Molloy, Joseph J., S.J.
 *Schramm, Wallace C., A.B.
 Youel, John M., B.S.

Worcester, Mass.
 Worcester, Mass.
 Baltimore, Md.
 Whitinsville, Mass.
 Worcester, Mass.
 Pierce, Neb.
 Huron, S. D.

SPECIAL STUDENTS

Cervantes, José
 Meredith, John H.

Mexico City, Mexico
 New Haven, Conn.

ARTS COURSE

Adams, John F.
 Albrecht, Henry F.
 Alishausky, Joseph P.
 Ambrose, John F.
 Argy, Thomas F. M.
 Arnold, James E.
 Ashe, Matthew J.
 Asselta, Franklyn G.
 Aucoin, Roland R.
 Austin, Joseph F.
 Auth, Charles P.
 Auth, James C.

Sophomore
 Junior
 Senior
 Junior
 Junior
 Senior
 Freshman
 Sophomore
 Senior
 Junior
 Freshman
 Junior

New Haven, Conn.
 Green Island, N. Y.
 Waterbury, Conn.
 Danvers, Mass.
 Turners Falls, Mass.
 Peabody, Mass.
 Springfield, Mass.
 Fitchburg, Mass.
 Spencer, Mass.
 Bondsville, Mass.
 Springfield, Mass.
 Springfield, Mass.

Baiorunos, John E.
 Baldwin, George N.
 Baldwin, Karl P.
 Bannin, Thomas J.
 Barnes, J. Arthur
 Barrett, Eugene A.
 Barrett, Robert J.
 Baxter, Gerard T.
 Baxter, Gordon A.

Sophomore
 Junior
 Sophomore
 Sophomore
 Junior
 Senior
 Junior
 Senior
 Sophomore

Brockton, Mass.
 Appleton, Wis.
 Appleton, Wis.
 Brooklyn, N. Y.
 Worcester, Mass.
 Philadelphia, Pa.
 Danbury, Conn.
 New York, N. Y.
 Brooklyn, N. Y.

* Died, Nov. 27, 1929. R. I. P.

Beegan, Edward W.	Freshman	New Haven, Conn.
Bennett, John J.	Junior	Ansonia, Conn.
Bergin, Charles M.	Junior	Worcester, Mass.
Bergin, Edward D.	Freshman	Waterbury, Conn.
Bergin, Stephen P.	Sophomore	Waterbury, Conn.
Bertsch, Leonard M.	Senior	Akron, Ohio
Birch, John J.	Senior	Worcester, Mass.
Blake, Matthew F.	Freshman	Brooklyn, N. Y.
Blake, Walter J.	Sophomore	Jersey City, N. J.
Booth, Roger A.	Senior	So. Berwick, Me.
Bouchard, Louis P.	Sophomore	Caribou, Me.
Bowes, Thomas E.	Senior	Worcester, Mass.
Bowler, John J.	Junior	Unionville, Conn.
Boyd, Luke H.	Senior	Jamestown, N. Y.
Boyle, John F.	Freshman	Pittston, Pa.
Brack, Thomas J.	Freshman	Fitchburg, Mass.
Bracken, Joseph L., Jr.	Sophomore	Astoria, L. I., N. Y.
Braun, Theodore F.	Sophomore	New Haven, Conn.
Breen, Donald F. X.	Freshman	New York, N. Y.
Brennan, William B.	Senior	New York, N. Y.
Bridges, Charles E.	Sophomore	Brooklyn, N. Y.
Broderick, Hugh F.	Senior	Swampscott, Mass.
Brosnan, John J.	Senior	Worcester, Mass.
Brosnan, Thomas J.	Freshman	Bristol, Conn.
Brown, James I.	Junior	Lee, Mass.
Brunner, George F.	Junior	Gardenville, N. Y.
Bruso, George E.	Freshman	Worcester, Mass.
Buckley, Charles J.	Junior	Worcester, Mass.
Burke, Daniel J.	Freshman	Westfield, Mass.
Burke, John A.	Sophomore	New York, N. Y.
Burke, Leo J.	Senior	Worcester, Mass.
Burns, Gerard J.	Sophomore	Brooklyn, N. Y.
Butkiewicz, Henry J.	Senior	Worcester, Mass.
Cafferty, Francis J.	Sophomore	Worcester, Mass.
Cahill, Frederick T., Jr.	Sophomore	Milford, Mass.
Cahill, John R., Jr.	Freshman	Gloucester, Mass.
Callahan, Charles R.	Freshman	Westfield, N. J.
Callahan, Daniel E., Jr.	Junior	Norwood, Mass.
Callahan, Edward J.	Junior	Lawrence, Mass.
Callahan, Edward V.	Freshman	Worcester, Mass.
Callahan, Frederick M.	Freshman	Worcester, Mass.
Callahan, Henry A.	Freshman	Dracut, Mass.
Callahan, Thomas F.	Junior	No. Adams, Mass.
Campbell, Raymond F.	Senior	Worcester, Mass.

Cannon, James E.	Freshman	Clinton, Mass.
Cannon, John P.	Sophomore	Windsor Locks, Conn.
Carey, Francis E.	Senior	Lowell, Mass.
Carey, Francis J.	Senior	Milton, Mass.
Carey, Thomas G.	Freshman	Defiance, Ohio
Carle, Clarke A.	Junior	Thompsonville, Conn.
Carlin, Gerald J.	Sophomore	Erie, Pa.
Carney, Frank T.	Junior	Hartford, Conn.
Carney, Leo T.	Junior	Fitchburg, Mass.*
Carroll, Charles R.	Freshman	Worcester, Mass.
Carroll, James M.	Senior	Springfield, Mass.
Carroll, Laurence J.	Freshman	Millville, Mass.
Carroll, Thomas F.	Junior	Millville, Mass.
Carroll, Thomas J.	Sophomore	Gloucester, Mass.
Casey, Adrian V.	Freshman	Scranton, Pa.
Cassell, Edward F.	Freshman	Boston, Mass.
Cassidy, Joseph C.	Sophomore	Holyoke, Mass.
Casson, Thomas H.	Senior	Flushing, N. Y.
Caulfield, Thomas E., Jr.	Sophomore	Woburn, Mass.
Cavallaro, Vincent J.	Freshman	Branford, Conn.
Cerasuolo, Anthony W.	Sophomore	Medford, Mass.
Chapitis, William J.	Senior	Rumford, Me.
Chiota, John P., Jr.	Junior	Bridgeport, Conn.
Ciarleglio, Francis J.	Freshman	Hartford, Conn.
Clancy, Stuart J.	Senior	Branford, Conn.
Clark, John A.	Sophomore	Great Barrington, Mass.
Clarke, John O'Brien	Freshman	Belle Harbor, L. I., N. Y.
Cleary, William J.	Sophomore	Elmhurst, N. Y.
Coffey, Eugene V.	Junior	Troy, N. Y.
Cole, Cyril G.	Sophomore	New Bedford, Mass.
Collins, Charles T.	Sophomore	Springfield, Mass.
Collins, James B.	Senior	Worcester, Mass.
Collins, James F.	Freshman	Norwood, Mass.
Collins, Joseph M., Jr.	Sophomore	Brooklyn, N. Y.
Collins, Timothy J., Jr.	Freshman	Holyoke, Mass.
Conlin, Eugene S.	Senior	Worcester, Mass.
Conlin, John P.	Freshman	Worcester, Mass.
Conlon, Charles F.	Sophomore	So. Boston, Mass.
Conlon, Joseph A.	Senior	Worcester, Mass.
Conneen, Lawrence W.	Freshman	Portland, Me.
Connell, Edwin T.	Junior	Mt. Vernon, N. Y.
Connell, James D.	Junior	Hoboken, N. J.
Connell, Robert E.	Senior	Jersey City, N. J.
Connelly, J. Frederick	Sophomore	Elmira, N. Y.
Connelly, Thomas G.	Senior	Brighton, Mass.

Conner, Joseph F., Jr.	Freshman	Holyoke, Mass.
Connolly, Edward P.	Junior	Natick, Mass.
Connor, John E.	Sophomore	Rochester, N. Y.
Connor, Joseph M.	Junior	Fall River, Mass.
Connors, Joseph H.	Freshman	E. Dedham, Mass.
Conway, Francis X.	Senior	New York, N. Y.
Conway, Leroy J.	Senior	Leicester, Mass.
Conway, William S.	Freshman	Springfield, Mass.
Cooney, Leo J.	Junior	Providence, R. I.
Costello, Francis D.	Junior	Worcester, Mass.
Costello, John J.	Senior	Boston, Mass.
Costello, Patrick J.	Senior	Portland, Me.
Costigan, Francis J.	Freshman	Springfield, Mass.
Cote, George E.	Junior	Springfield, Mass.
Cotter, Edward W.	Senior	Concord, N. H.
Cotter, William E.	Senior	Worcester, Mass.
Crane, Richard D.	Freshman	Westfield, Mass.
Crapolicchio, Dante V.	Junior	Worcester, Mass.
Crimmins, Thomas F.	Senior	Brooklyn, N. Y.
Croce, Edmund J.	Senior	Worcester, Mass.
Cronan, Carey F.	Freshman	Bridgeport, Conn.
Cronin, Daniel J.	Senior	Springfield, Mass.
Cronin, Francis P.	Freshman	Worcester, Mass.
Cross, Ralph T.	Senior	Jamaica, L. I., N. Y.
Croteau, John T.	Junior	Worcester, Mass.
Crowley, John J.	Senior	Lynn, Mass.
Crowley, Robert E.	Sophomore	Quincy, Mass.
Cullen, Bernard A.	Senior	Hamilton, Mass.
Cullen, Leo J.	Sophomore	Naugatuck, Conn.
Cullum, Thomas A. M.	Senior	Jersey City, N. J.
Cummings, Paul M.	Sophomore	Worcester, Mass.
Cuneo, Kenneth J.	Freshman	Medford, Mass.
Cunningham, Joseph A.	Junior	New York, N. Y.
Curran, Robert T.	Junior	New York, N. Y.
Currie, Edward P.	Junior	East Orange, N. J.
Currier, James A.	Freshman	Island Pond, Vt.
Curry, Edward F.	Freshman	Quincy, Mass.
Curry, Francis R.	Sophomore	New York, N. Y.
Cutroneo, John J.	Freshman	Brooklyn, N. Y.
Cyr, Leo G.	Senior	Limestone, Me.
Dacey, Francis L.	Freshman	Lowell, Mass.
Dailey, Thomas J.	Freshman	Fitchburg, Mass.
Dalbec, Alexander J.	Freshman	Oxford, Mass.
Daley, James S.	Senior	Lowell, Mass.

Daley, Robert W.	Sophomore	Dorchester, Mass.
Daly, Charles F.	Junior	Worcester, Mass.
Dante, Lee F.	Freshman	Washington, D. C.
D'Apice, Frank P.	Senior	Yonkers, N. Y.
Darche, George R.	Sophomore	Hillside, N. J.
Davey, Charles A.	Sophomore	Brooklyn, N. Y.
Davis, Martin E.	Sophomore	Amherst, Mass.
Davoren, David I.	Senior	Milford, Mass.
Dawson, John S.	Senior	Holyoke, Mass.
DeCourcy, Daniel J., Jr.	Senior	Lawrence, Mass.
Deeley, James J.	Junior	Waterbury, Conn.
Degnan, Thomas J., Jr.	Freshman	Worcester, Mass.
Delaney, John F.	Sophomore	Norwich, Conn.
Delaney, William E.	Sophomore	New York, N. Y.
Delehanty, Philip W.	Sophomore	Rutland, Mass.
DeMontigny, Gerard E.	Sophomore	Nashua, N. H.
Denehy, Charles L., Jr.	Junior	Waterbury, Conn.
Derby, George F.	Sophomore	Spencer, Mass.
Derwin, Edward P.	Senior	Waterbury, Conn.
Desnoes, Louis A.	Senior	Kingston, Jamaica, B. W. I.
Devine, Robert E.	Senior	Providence, R. I.
Devlin, James A.	Sophomore	Lawrence, Mass.
Dillon, Robert E.	Sophomore	Binghamton, N. Y.
Dillon, Thomas P.	Freshman	Worcester, Mass.
Doheny, Bernard L.	Junior	Fitchburg, Mass.
Dolan, William L.	Senior	Adams, Mass.
Donahue, Cornelius F.	Senior	Manville, R. I.
Donahue, Leamon F.	Senior	Bartlett, N. H.
Donahue, Paul J.	Senior	Worcester, Mass.
Donlon, Francis X.	Senior	Saugerties, N. Y.
Donnelly, James F.	Sophomore	Ridgewood, N. J.
Donnelly, James P.	Sophomore	No. Brookfield, Mass.
Donohue, John J.	Senior	Worcester, Mass.
Donohue, Michael T.	Freshman	Albany, N. Y.
Doolan, Edwin F.	Freshman	Fall River, Mass.
Dore, John B.	Freshman	Cambridge, Mass.
Dorsey, John P.	Freshman	Worcester, Mass.
Dougherty, Edward M.	Junior	Easthampton, Mass.
Dougherty, Joseph C.	Senior	Chester, Penna.
Dougherty, Thomas L.	Senior	Waterbury, Conn.
Dowd, Francis E.	Sophomore	Chicopee Falls, Mass.
Dowd, John A.	Sophomore	Worcester, Mass.
Dowd, John E.	Senior	Worcester, Mass.
Dowgielewicz, Edward F.	Freshman	Spencer, Mass.
Downs, Charles E.	Senior	Fall River, Mass.

Doyle, Anthony E.	Freshman	Baltimore, Md.
Doyle, Edward L., Jr.	Freshman	Roslindale, Mass.
Doyle, James F.	Junior	Syracuse, N. Y.
Doyle, James J. C.	Junior	Holyoke, Mass.
Doyle, James J.	Senior	New York, N. Y.
Doyle, Patrick A.	Senior	Springfield, Mass.
Doyle, Raymond J.	Senior	Oriskany Falls, N. Y.
Doyle, Walter J.	Freshman	Wakefield, Mass.
Dozier, Carroll T.	Sophomore	Richmond, Va.
Drapeau, George Jr.	Junior	Brunswick, Maine
Drohan, Thomas S.	Junior	Brockton, Mass.
Duggan, Joseph C.	Sophomore	New Bedford, Mass.
Dumas, P. Adelard	Freshman	Auburn, Mass.
Dunn, Joseph V.	Freshman	Pittsfield, Mass.
Dunn, Thomas M.	Senior	Springfield, Mass.
Dupskey, Stephen J.	Junior	Worcester, Mass.
Durkin, Edward R.	Sophomore	Clinton, Mass.
Dwight, John T.	Freshman	New York, N. Y.
Dwyer, John G.	Senior	Lowell, Mass.
Dwyer, Thomas F.	Junior	Providence, R. I.
Dwyer, Thomas H.	Freshman	Rochester, N. Y.
Eagan, Joseph M.	Senior	Worcester, Mass.
Earls, Martin J.	Freshman	Southbridge, Mass.
Earls, Thomas W.	Junior	Cincinnati, Ohio
Earls, William T.	Junior	Cincinnati, Ohio
Eddy, Thomas W.	Sophomore	Rutland, Vt.
Edgerton, Francis P.	Freshman	No. Adams, Mass.
Ehrhardt, Alfred E.	Senior	Passaic, N. J.
Eidenbach, Herbert J.	Sophomore	New York, N. Y.
Eiserloh, Paul J.	Senior	Lowell, Mass.
Elliott, Stephen K.	Junior	Southington, Conn.
Endres, William S.	Sophomore	Flushing, L. I.
Engels, Walter D.	Sophomore	Rockaway Beach, N. Y.
Ernst, Carl C.	Freshman	Great Neck, N. Y.
Evers, John A.	Senior	Paterson, N. J.
Fairbend, Gregory L.	Sophomore	Hollis, N. Y.
Fanelli, Raymond J.	Junior	Thompsonville, Conn.
Fanelli, Rocco J.	Sophomore	Hartford, Conn.
Farnon, John P.	Sophomore	Worcester, Mass.
Farrell, Edward J.	Freshman	Worcester, Mass.
Farrell, Francis L.	Junior	Rumford, Maine
Farrell, John F.	Freshman	Worcester, Mass.
Farrell, Thomas W.	Sophomore	Hartford, Conn.

Farrell, William F.	Sophomore	Worcester, Mass.
Faucher, Arthur J.	Sophomore	Worcester, Mass.
Fay, Robert V.	Freshman	Boston, Mass.
Fee, Bernard H., Jr.	Freshman	Far Rockaway, N. Y.
Feeny, Timothy M.	Senior	Medford, Mass.
Feily, Joseph F.	Junior	Rensselaer, N. Y.
Fenton, Daniel E.	Junior	Holyoke, Mass.
Finn, Bernard F.	Senior	Jersey City, N. J.
Finneran, Joseph J.	Junior	Providence, R. I.
Fish, Edgar F.	Senior	Worcester, Mass.
Fitzgerald, Francis N.	Senior	Worcester, Mass.
Fitzgerald, John F.	Sophomore	Worcester, Mass.
Fitzgerald, Joseph F.	Senior	Framingham, Mass.
Fitzgerald, Maurice A.	Senior	New York, N. Y.
Fitzpatrick, Raymond J.	Freshman	Waterbury, Conn.
Fitzsimmons, Louis G.	Sophomore	St. Louis, Mo.
Flanagan, Henry C.	Sophomore	Dorchester, Mass.
Flanagan, Peter J.	Freshman	Portland, Maine
Flanagan, William J.	Sophomore	South Barre, Mass.
Flannigan, Justin C.	Sophomore	Binghamton, N. Y.
Flatley, James J.	Sophomore	Manchester, Mass.
Flavin, Daniel F.	Senior	Rockland, Mass.
Flynn, Bernard J.	Freshman	Unionville, Conn.
Flynn, Simon A.	Freshman	Holyoke, Mass.
Fogarty, Thomas F.	Sophomore	Providence, R. I.
Foley, James F.	Sophomore	Newport, R. I.
Foley, Merton J.	Freshman	Portland, Maine
Foley, William J.	Senior	Springfield, Mass.
Foran, John W.	Senior	Worcester, Mass.
Forbes, Albert B.	Junior	Brookline, Mass.
Ford, Lawrence T.	Freshman	Rockland, Mass.
Ford, Leo R.	Freshman	Newport, R. I.
Fox, John R.	Sophomore	Chicago, Ill.
Foy, Joseph G.	Junior	Quincy, Mass.
Friel, Charles J.	Junior	Worcester, Mass.
Friel, Edward A.	Sophomore	Worcester, Mass.
Fryer, William J.	Junior	Hartford, Conn.
Furay, Harry B.	Freshman	Jackson H'ts, L. I., N. Y.
Fynn, Francis J.	Sophomore	Rumford, R. I.
Gain, William P.	Freshman	Jefferson, Mass.
Gallagher, Francis A., 3rd	Sophomore	Providence, R. I.
Gallagher, James J.	Freshman	Worcester, Mass.
Gallagher, James L.	Sophomore	Pittsburgh, Pa.
Gallagher, Joseph P. F.	Sophomore	New York, N. Y.

Gallagher, William M.	Junior	Worcester, Mass.
Gallahue, Stephen C.	Senior	Boston, Mass.
Gannon, John F., Jr.	Senior	Pittsfield, Mass.
Garrahan, James J.	Senior	Hazleton, Pa.
Garvey, Edward M.	Freshman	Northampton, Mass.
Gebhardt, William G.	Junior	New Haven, Conn.
Gendron, Edward L.	Senior	Fitchburg, Mass.
Gibson, Gardiner S.	Freshman	Dayton, Ohio
Gilchrist, James F.	Senior	Taunton, Mass.
Gilday, Edward F.	Junior	Holyoke, Mass.
Golart, David W.	Sophomore	Vineyard Haven, Mass.
Gorman, Denis F.	Freshman	Worcester, Mass.
Gorman, John J.	Junior	Wilkes-Barre, Pa.
Grady, James A.	Junior	Worcester, Mass.
Grady, Paul E.	Junior	Marlboro, Mass.
Greene, Walter L.	Sophomore	Brooklyn, N. Y.
Griffin, James J.	Senior	Hartford, Conn.
Grimes, Martin O.	Freshman	Newport, R. I.
Grote, Raymond J.	Sophomore	Brooklyn, N. Y.

Haggerty, John J.	Freshman	New York, N. Y.
Halligan, Howard F.	Freshman	Troy, N. Y.
Halligan, John P.	Sophomore	Troy, N. Y.
Halloran, Edward D.	Junior	Torrington, Conn.
Halloran, Francis T.	Senior	So. Boston, Mass.
Halloran, Richard F.	Junior	Worcester, Mass.
Halloran, Richard J.	Freshman	St. Louis, Mo.
Hamilton, Edward A.	Sophomore	Babylon, N. Y.
Hampsey, Bernard J.	Junior	Mt. Lebanon, Pa.
Handel, George W.	Junior	Youngstown, Ohio
Hanify, Edward B.	Freshman	Fall River, Mass.
Hanley, Paul F.	Sophomore	Worcester, Mass.
Hanlon, David E.	Sophomore	Hyde Park, Mass.
Hanrahan, Martin J.	Freshman	Worcester, Mass.
Harley, George V.	Sophomore	Freeport, L. I., N. Y.
Harold, Thomas B.	Freshman	Schenectady, N. Y.
Harrahy, John P.	Senior	Worcester, Mass.
Harrington, Francis V.	Senior	Buffalo, N. Y.
Harrington, John C.	Sophomore	Fall River, Mass.
Harrington, John E.	Sophomore	Saratoga Springs, N. Y.
Harrington, John F.	Junior	Holyoke, Mass.
Harrison, Raymond J.	Junior	Taunton, Mass.
Harrity, Joseph T.	Sophomore	Clinton, Mass.
Hart, Philip J.	Freshman	Worcester, Mass.
Hartman, J. Francis	Sophomore	Victor, N. Y.

Hasslinger, John B.	Senior	Naugatuck, Conn.
Hastings, Joseph J.	Freshman	Clinton, Mass.
Hayden, William S.	Sophomore	Peabody, Mass.
Hayes, Neil B.	Sophomore	Adrian, Mich.
Hayes, Stephen V.	Senior	New Bedford, Mass.
Healy, Nicholas J.	Junior	New York, N. Y.
Hegarty, Richard F.	Junior	West Medford, Mass.
Heimer, Arthur J.	Junior	Clinton, Mass.
Hennessey, Joseph F.	Junior	Springfield, Mass.
Hennessey, Paul T.	Junior	Pittsburgh, Penna.
Henry, James F.	Junior	Milton, Mass.
Henry, Walter E.	Freshman	Worcester, Mass.
Hickey, Fabian S.	Senior	Jersey City, N. J.
Hickey, Francis R.	Sophomore	Worcester, Mass.
Hidalgo, Edward J.	Freshman	New York, N. Y.
Hindle, William V.	Freshman	Providence, R. I.
Hiney, William G.	Freshman	Spencer, Mass.
Hintelmann, Paul J.	Freshman	Rumson, N. J.
Hoar, Leo J.	Senior	New London, Conn.
Hogan, Francis A.	Senior	Albany, N. Y.
Holland, John J.	Sophomore	New York, N. Y.
Holly, Thomas W.	Freshman	Worcester, Mass.
Horgan, Charles S.	Freshman	New York, N. Y.
Houlihan, C. Edward	Senior	Ware, Mass.
Houlihan, Edward T.	Freshman	Lexington, Ky.
Houlihan, Joseph E., Jr.	Junior	Bangor, Maine
Howe, Raymond J.	Sophomore	New York, N. Y.
Howe, William F. X.	Freshman	Jersey City, N. J.
Hoye, Clement E.	Senior	Taunton, Mass.
Hurley, John F.	Sophomore	Worcester, Mass.
Hussey, Thomas F.	Junior	Worcester, Mass.
Hynes, Thomas W.	Junior	Brooklyn, N. Y.
Igoe, James E.	Freshman	Brooklyn, N. Y.
Igoe, Joseph A.	Junior	Brooklyn, N. Y.
Izzo, Louis	Junior	New Haven, Conn.
Izzo, Paul F.	Freshman	Dorchester, Mass.
Jakubowski, Anthony J.	Freshman	Webster, Mass.
Javorski, Francis	Freshman	Thompsonville, Conn.
Jeremia, Francis B.	Sophomore	Richmond Hill, N. Y.
Jones, Philip T.	Junior	E. Weymouth, Mass.
Jones, William F., Jr.	Freshman	Waterbury, Conn.
Joyce, James J.	Senior	Worcester, Mass.

Kaicher, John J.	Sophomore	Brooklyn, N. Y.
Kane, Thomas F.	Freshman	Worcester, Mass.
Kane, Thomas J.	Junior	Albany, N. Y.
Kane, William E.	Sophomore	Worcester, Mass.
Katsuranis, Joseph J.	Sophomore	Westfield, Mass.
Kavanaugh, John J.	Sophomore	Worcester, Mass.
Keaney, John A.	Senior	Worcester, Mass.
Kearns, John A.	Freshman	Fitchburg, Mass.
Keating, Anthony F., 2nd	Sophomore	Pittsburgh, Penna.
Keating, John G.	Sophomore	Fitchburg, Mass.
Keating, Joseph P.	Sophomore	Fitchburg, Mass.
Keenan, Edward J.	Junior	New York, N. Y.
Keenan, John E.	Freshman	Worcester, Mass.
Kelleher, Edmund P.	Junior	Woburn, Mass.
Kelleher, John E.	Sophomore	New Haven, Conn.
Kelly, Francis D.	Freshman	Baltimore, Md.
Kelly, James F.	Freshman	Schenectady, N. Y.
Kelly, James J.	Senior	W. Hempstead, L. I., N. Y.
Kelley, James L.	Sophomore	Waterbury, Conn.
Kelly, Thomas P.	Junior	Holyoke, Mass.
Kennedy, Thomas A.	Freshman	New York, N. Y.
Kennedy, Joseph C.	Senior	New York, N. Y.
Kenny, Thomas F.	Freshman	Staten Island, N. Y.
Kent, John F.	Junior	New Britain, Conn.
Kerrigan, John J., Jr.	Sophomore	Fall River, Mass.
Kerrigan, Patrick E.	Junior	Clinton, Mass.
Kielty, Daniel F.	Senior	Fitchburg, Mass.
King, Donald J.	Freshman	Providence, R. I.
King, Thomas E.	Sophomore	Worcester, Mass.
Kinney, Frank J.	Junior	Branford, Conn.
Kirwin, Harry W.	Freshman	New York, N. Y.
Kowalski, Stephen J., Jr.	Sophomore	Worcester, Mass.
Labbe, Onil B.	Junior	St. Leonard, N. B., Can.
Lally, John F.	Freshman	Dover Plains, N. Y.
Lally, Robert F.	Junior	Milford, Mass.
Landis, John C.	Sophomore	Worcester, Mass.
Lane, John R.	Junior	Peabody, Mass.
Langford, John A.	Senior	Springfield, Mass.
Langlois, William E.	Freshman	Worcester, Mass.
Larkin, Frank L.	Senior	Carbondale, Penna.
Lawler, John F.	Sophomore	Worcester, Mass.
Leach, Andrew J., Jr.	Senior	Brookfield, Mass.
Leary, Timothy J.	Sophomore	Worcester, Mass.
LeClair, Felix R.	Sophomore	Holyoke, Mass.

Leddy, Raymond G.	Freshman	New York, N. Y.
Lee, James J.	Senior	Worcester, Mass.
Lee, Thomas F.	Senior	Danbury, Conn.
Leland, Albert E.	Senior	Worcester, Mass.
Lemay, Hervey J.	Freshman	Worcester, Mass.
Lenahan, Daniel W.	Senior	Taunton, Mass.
Lenahan, John R.	Freshman	Providence, R. I.
Leone, Alvin C.	Junior	Hartford, Conn.
Lepore, Dominick J.	Freshman	Thompsonville, Conn.
Lillich, Francis C.	Freshman	Rochester, N. Y.
Lillich, Joseph D.	Sophomore	Rochester, N. Y.
Lilly, Edward P.	Sophomore	Brooklyn, N. Y.
Loftus, John J.	Junior	Worcester, Mass.
Loftus, Raymond J.	Sophomore	Utica, N. Y.
Long, Robert L.	Sophomore	Boston, Mass.
Lovelock, Francis J.	Freshman	New York, N. Y.
Luby, William J.	Freshman	Meriden, Conn.
Lucey, Frank L.	Sophomore	Worcester, Mass.
Lukaszek, Joseph J.	Sophomore	Millbury, Mass.
Lussier, Raphael A.	Senior	Woonsocket, R. I.
Lynch, Daniel A.	Sophomore	Brooklyn, N. Y.
Lynch, Francis A.	Senior	Worcester, Mass.
Lynch, George F.	Freshman	Worcester, Mass.
Lynch, Louis E.	Freshman	New York, N. Y.
Lynch, Robert A.	Junior	Andover, N. Y.
MacLaughlin, Edward J.	Senior	Manchester, N. H.
Madaus, George F.	Junior	Worcester, Mass.
Maggiolo, Walter A.	Senior	Brooklyn, N. Y.
Maginnis, Charles D., Jr.	Sophomore	Brookline, Mass.
Maher, Joseph P.	Junior	Dedham, Mass.
Maher, William F.	Junior	New Haven, Conn.
Mahoney, Arthur L.	Sophomore	Taunton, Mass.
Mahoney, Daniel E.	Junior	Natick, Mass.
Mahoney, Francis X.	Freshman	Manchester, N. H.
Mahoney, John J.	Junior	Worcester, Mass.
Mahoney, William E.	Freshman	Greenfield, Mass.
Maley, Austin P.	Freshman	Mt. Carmel, Penna.
Malley, Lawrence J.	Freshman	Thompsonville, Conn.
Malone, Thomas B.	Senior	Springfield, Mass.
Mandry, Joseph F. X.	Freshman	Brooklyn, N. Y.
Mankiewicz, Simon F.	Junior	E. Plymouth, Penna.
Mansfield, James F., Jr.	Sophomore	Garden City, L. I., N. Y.
Mara, Walter D.	Junior	Worcester, Mass.
March, Bartholomew G.	Senior	Bethlehem, Conn.

Martin, John F.	Senior	Worcester, Mass.
Martin, Maurice B.	Freshman	Holyoke, Mass.
Martin, Raymond O.	Junior	Toledo, Ohio
Matteo, Domenick R.	Freshman	Hollis, N. Y.
Mayer, Fred W.	Sophomore	Rye, N. Y.
Mayock, John F.	Junior	Wilkes-Barre, Penna.
Meany, John H.	Sophomore	Hinsdale, N. H.
Meikle, Robert J.	Sophomore	Newport, R. I.
Merrill, John F.	Sophomore	Worcester, Mass.
Mihok, Paul F.	Freshman	New York, N. Y.
Millea, J. Franklin	Sophomore	Peabody, Mass.
Minor, Stephen R.	Senior	Worcester, Mass.
Mirliani, Fred S.	Sophomore	New Britain, Conn.
Missett, James S.	Junior	Springfield, Mass.
Missett, Joseph R.	Sophomore	New Haven, Conn.
Mitchell, Robert E.	Junior	E. Weymouth, Mass.
Moakley, Francis J.	Sophomore	New Haven, Conn.
Molloy, George P.	Junior	Worcester, Mass.
Monagan, Walter E., Jr.	Sophomore	Waterbury, Conn.
Monaghan, James E.	Freshman	Fall River, Mass.
Mooney, Daniel L.	Freshman	Fall River, Mass.
Moran, George B.	Freshman	New York, N. Y.
Moran, Martin L.	Freshman	Leominster, Mass.
Morgan, Hugh J.	Sophomore	Staten Island, N. Y.
Morgan, John J.	Junior	East Jaffrey, N. H.
Morgan, Thomas J.	Junior	Fitchburg, Mass.
Moriarty, Edward J.	Freshman	Holyoke, Mass.
Moriarty, Edwin S.	Sophomore	Fitchburg, Mass.
Moroney, Charles G.	Sophomore	Collinsville, Conn.
Morris, J. Frank	Freshman	New York, N. Y.
Morrison, Philip J.	Junior	Nashua, N. H.
Moynihan, Francis J.	Freshman	Waterbury, Conn.
Moynihan, James J.	Sophomore	Worcester, Mass.
Muldoon, Frederic J.	Senior	Brighton, Mass.
Mulheirn, John F., Jr.	Freshman	Erie, Penna.
Mulhern, John F., Jr.	Freshman	Taunton, Mass.
Mullaney, Raymond F.	Senior	Worcester, Mass.
Mullen, Alfred A.	Sophomore	Methuen, Mass.
Mullen, Joseph F.	Junior	Paterson, N. J.
Mullins, Harold E.	Senior	Bridgeport, Conn.
Mulvey, John T.	Senior	New York, N. Y.
Murphy, Charles J.	Sophomore	Danbury, Conn.
Murphy, Charles J.	Junior	Waterbury, Conn.
Murphy, Edward F.	Senior	White Plains, N. Y.
Murphy, Edward J.	Freshman	Albany, N. Y.

Murphy, Edward L.	Sophomore	Worcester, Mass.
Murphy, Francis T.	Sophomore	No. Adams, Mass.
Murphy, Francis X.	Freshman	Westfield, Mass.
Murphy, Frederick J.	Sophomore	Norwich, Conn.
Murphy, Jerome F., Jr.	Sophomore	Wellesley Hills, Mass.
Murphy, John E.	Freshman	Newton Upper Falls, Mass.
Murphy, John J.	Senior	Danbury, Conn.
Murphy, John P.	Junior	Worcester, Mass.
Murphy, Joseph D.	Freshman	Whitman, Mass.
Murray, George C.	Freshman	Boston, Mass.
Murray, George F.	Junior	Holyoke, Mass.
Murray, J. Edward	Junior	LeRoy, N. Y.
Murray, Martin B.	Freshman	Springfield, Mass.
Murray, Matthew E.	Sophomore	Carlyle, Ill.
Murtough, James M.	Senior	West Springfield, Mass.
McAleer, Myles R.	Freshman	Worcester, Mass.
McArdle, Paul B.	Junior	Worcester, Mass.
McAuliffe, John D.	Freshman	Worcester, Mass.
McAvey, Frederick P.	Senior	Shrewsbury, Mass.
McCafferty, Bernard P.	Sophomore	Lansdowne, Penna.
McCann, Donald H.	Sophomore	Rome, N. Y.
McCarthy, Charles D.	Junior	No. Brookfield, Mass.
McCarthy, John T.	Freshman	Whitestone, L. I., N. Y.
McCarthy, Richard J.	Freshman	Chicopee, Mass.
McCarthy, Thomas J.	Freshman	Worcester, Mass.
McCarthy, Thomas W.	Freshman	Springfield, Mass.
McClure, Edward T.	Freshman	Worcester, Mass.
McCooey, Edwin F.	Senior	Blackstone, Mass.
McCann, Donald J.	Senior	New Britain, Conn.
McCue, Eugene P.	Sophomore	New York, N. Y.
McCue, John H.	Junior	Milton, Mass.
McCusker, Joseph A.	Senior	Rockville, Conn.
McDermott, Donald E.	Freshman	Worcester, Mass.
McDermott, John M.	Senior	Branford, Conn.
McDevitt, James G.	Sophomore	Binghamton, N. Y.
McDonald, John B.	Senior	Rockville Center, N. Y.
McDonnell, John J.	Senior	Groveton, N. H.
McDonnell, Preston J.	Junior	Torrington, Conn.
McDonough, Harold J.	Freshman	South Lee, Mass.
McDonough, John F.	Freshman	Naugatuck, Conn.
McEnaney, Robert W.	Junior	Waltham, Mass.
McFadden, Patrick J.	Junior	Waterbury, Conn.
McGarry, Bernard H.	Freshman	Proctor, Vt.
McGee, Edward D.	Senior	Hartford, Conn.
McGee, James F.	Freshman	Holyoke, Mass.

McGinn, Robert H.	Freshman	Worcester, Mass.
McGinness, Arthur F.	Freshman	New York, N. Y.
McGivern, Owen P.	Junior	New York, N. Y.
McGovern, Thomas F.	Junior	Worcester, Mass.
McGrady, James J.	Freshman	Worcester, Mass.
McGrane, Henry M.	Senior	Troy, N. Y.
McGrath, Francis J.	Senior	Worcester, Mass.
McGrath, William J.	Freshman	Worcester, Mass.
McGratty, Arthur R.	Junior	Brooklyn, N. Y.
McGratty, Frank L.	Junior	Brooklyn, N. Y.
McGratty, Gerald R.	Freshman	Brooklyn, N. Y.
McGuigan, Joseph E.	Sophomore	Fall River, Mass.
McGuire, John J., Jr.	Junior	New York, N. Y.
McHugh, Thomas J.	Junior	Peabody, Mass.
McInerney, Walter E.	Junior	Jersey City, N. J.
McInterny, George F.	Freshman	Worcester, Mass.
McIntyre, Joseph W.	Sophomore	Clinton, Mass.
McKee, John J.	Junior	Lorain, Ohio
McKenna, John J.	Junior	Boston, Mass.
McKenna, William A.	Senior	Worcester, Mass.
McKeon, John G.	Sophomore	Albany, N. Y.
McKeon, Thomas F.	Freshman	New Haven, Conn.
McLaughlin, George A.	Senior	Edgewood, R. I.
McMahon, Cornelius P.	Senior	Pittsfield, Mass.
McMonagle, Edward L.	Junior	So. Portland, Maine.
McNally, Raymond E.	Freshman	Worcester, Mass.
McNally, William A.	Senior	Clinton, Mass.
McNamara, John W.	Senior	Clinton, Mass.
McNaughton, Roy D.	Freshman	Portland, Maine.
McRell, William F.	Senior	Clinton, Mass.
Nash, Francis C.	Junior	Rochester, N. Y.
Nagle, George E.	Sophomore	West Haven, Conn.
Nicholson, James E.	Freshman	Syracuse, N. Y.
Nicholson, Joseph L.	Sophomore	Syracuse, N. Y.
Niemiec, Alfred J.	Freshman	Meriden, Conn.
Nixon, William J.	Sophomore	Naugatuck, Conn.
Nolan, John J.	Sophomore	Worcester, Mass.
Normile, Charles M.	Senior	Cambridge, Mass.
Norton, Joseph W.	Junior	Worcester, Mass.
Oberlander, Martin J.	Senior	Brooklyn, N. Y.
O'Brien, Donald F.	Senior	Flushing, L. I., N. Y.
O'Brien, Edward J.	Freshman	Portland, Maine.
O'Brien, Frederick R.	Sophomore	Norwood, Mass.

O'Brien, James F.	Senior	Worcester, Mass.
O'Brien, Joseph A.	Freshman	Worcester, Mass.
O'Brien, Thomas F.	Junior	Mineville, N. Y.
O'Brien, William J.	Sophomore	Granville, N. Y.
O'Connell, Enos J.	Senior	Thomaston, Conn.
O'Connell, Francis T.	Senior	Torrington, Conn.
O'Connell, John B.	Sophomore	Worcester, Mass.
O'Connell, John D.	Senior	Marlboro, Mass.
O'Connell, Patrick J.	Freshman	Manchester, N. H.
O'Connell, Paul D.	Sophomore	Mittineague, Mass.
O'Connell, Philip J.	Sophomore	Worcester, Mass.
O'Connell, Thomas J.	Freshman	New Rochelle, N. Y.
O'Connell, William F., Jr.	Junior	Worcester, Mass.
O'Connell, William F.	Sophomore	Jackson Heights, N. Y.
O'Connor, John J.	Sophomore	Worcester, Mass.
O'Connor, John J.	Junior	Worcester, Mass.
O'Connor, John T.	Junior	Worcester, Mass.
O'Connor, Patrick F.	Sophomore	Jamaica Plain, Mass.
O'Connor, T. Francis	Senior	Lawrence, Mass.
O'Connor, Thomas J.	Freshman	Worcester, Mass.
O'Connor, William J.	Sophomore	Bloomfield, Conn.
O'Day, John J., Jr.	Freshman	Worcester, Mass.
O'Donnell, William G.	Senior	Bennington, Vt.
O'Flynn, Hugh F.	Freshman	Worcester, Mass.
O'Gorman, John L.	Freshman	Worcester, Mass.
O'Keefe, Thomas J.	Freshman	Worcester, Mass.
O'Neil, Daniel J.	Junior	Springfield, Mass.
O'Neil, Eldon H.	Sophomore	Brockton, Mass.
O'Neil, Robert S.	Sophomore	Glen Ridge, N. J.
O'Neill, John M.	Senior	Harrison, N. J.
O'Reilly, Francis P.	Junior	Worcester, Mass.
O'Reilly, J. Russell	Junior	Brooklyn, N. Y.
O'Reilly, Joseph J., Jr.	Freshman	Brooklyn, N. Y.
O'Rourke, Edward J.	Freshman	Worcester, Mass.
O'Rourke, Francis W.	Sophomore	Worcester, Mass.
O'Shea, John J.	Junior	Malden, Mass.
O'Sullivan, Thomas V.	Senior	Worcester, Mass.
O'Sullivan, William B.	Junior	Lewiston, Me.
Palmer, Richard B.	Sophomore	Fitchburg, Mass.
Paolucci, Donato M.	Sophomore	Waterbury, Conn.
Parent, Leslie M.	Sophomore	Westfield, Mass.
Payton, Joseph C.	Freshman	Fall River, Mass.
Percy, John M.	Sophomore	New York, N. Y.
Perreault, Homer F.	Junior	Worcester, Mass.

Peters, William W.	Freshman	Brooklyn, N. Y.
Pettinelli, Anthony F.	Junior	So. Milford, Mass.
Philbin, James T.	Freshman	Clinton, Mass.
Picardi, Armand A.	Junior	Newark, N. J.
Pitts, John E.	Freshman	Concord, N. H.
Pottemberg, Joseph C.	Sophomore	Cambridge, Mass.
Power, Pierce P.	Freshman	Worcester, Mass.
Powers, James J.	Senior	Worcester, Mass.
Powers, James V.	Sophomore	Worcester, Mass.
Powers, John F.	Sophomore	Worcester, Mass.
Powers, John J.	Junior	Albany, N. Y.
Price, Thomas J.	Junior	Worcester, Mass.
Quinn, George S.	Freshman	Chicopee, Mass.
Quinn, Lawrence J.	Freshman	Methuen, Mass.
Quinn, Paul M.	Senior	New York, N. Y.
Rafferty, Edmund J.	Senior	Worcester, Mass.
Rafferty, Harold F.	Sophomore	So. Glens Falls, N. Y.
Rafferty, Leo E.	Senior	Jamaica Plain, Mass.
Raleigh, James J.	Freshman	Brooklyn, N. Y.
Reardon, Edward R.	Freshman	Fitchburg, Mass.
Reavey, Edwin J.	Freshman	Spencer, Mass.
Regan, John F.	Freshman	Brooklyn, N. Y.
Regan, William H., Jr.	Freshman	Worcester, Mass.
Reilly, Herbert W.	Freshman	Rensselaer, N. Y.
Reilly, Robert B.	Senior	Jersey City, N. J.
Revane, Edward J.	Freshman	No. Brookfield, Mass.
Reynolds, Christopher J.	Freshman	New Haven, Conn.
Reynolds, James P.	Senior	Pittsfield, Mass.
Reynolds, Joseph A.	Sophomore	Naugatuck, Conn.
Richards, Raymond J.	Senior	Hartford, Conn.
Rickard, Norman E.	Sophomore	Rochester, N. Y.
Ridge, Stephen J.	Junior	So. Boston, Mass.
Ridikevich, George J.	Sophomore	Worcester, Mass.
Riedl, Paul D.	Junior	Worcester, Mass.
Riley, Francis X.	Freshman	Chicago, Ill.
Ring, David E.	Junior	New Haven, Conn.
Ring, John F.	Senior	Worcester, Mass.
Riopel, Daniel J.	Freshman	Shrewsbury, Mass.
Ritzel, Richard S.	Sophomore	New York, N. Y.
Roch, George E.	Senior	No. Grosvenordale, Conn.
Roche, Patrick J.	Freshman	Worcester, Mass.
Roche, William J., Jr.	Senior	Worcester, Mass.
Rohrer, Fred C.	Sophomore	W. Hartford, Conn.

Rooney, Frank E.	Freshman	Carbondale, Pa.
Rooney, Marshall F.	Junior	Nyack, N. Y.
Rowan, Robert P.	Freshman	Pittston, Pa.
Rowe, Kenneth F.	Sophomore	Lynn, Mass.
Russell, Joseph A.	Freshman	Worcester, Mass.
Ryan, Daniel P.	Freshman	No. Grafton, Mass.
Ryan, Edward B.	Senior	Clifton, N. J.
Ryan, Edward J.	Senior	Waterbury, Conn.
Ryan, John C.	Senior	Lynn, Mass.
Ryan, Philip E.	Freshman	Worcester, Mass.

Sableski, Constantine C.	Freshman	Worcester, Mass.
Salvato, Henry H.	Junior	New York, N. Y.
Santen, Vernon B.	Sophomore	Utica, N. Y.
Sayers, John F.	Sophomore	New York, N. Y.
Scales, Peter E.	Sophomore	Worcester, Mass.
Scannell, Joseph W.	Freshman	Worcester, Mass.
Scannell, Thomas P.	Freshman	Brooklyn, N. Y.
Schoenrock, Paul F.	Freshman	Westfield, Mass.
Schopfer, Lyle C.	Sophomore	Syracuse, N. Y.
Scollin, Walter J.	Freshman	Lynn, Mass.
Seaman, Robert A.	Junior	Brooklyn, N. Y.
Seith, Michael J.	Freshman	Brooklyn, N. Y.
Sexton, John J.	Sophomore	Worcester, Mass.
Shanahan, Donald G.	Junior	Lowell, Mass.
Shanahan, Henry J.	Senior	Forest Hills, Mass.
Shanahan, Jerome F.	Senior	Forest Hills, Mass.
Shannon, Paul F.	Freshman	Newton, Mass.
Shaughnessy, John H.	Freshman	Worcester, Mass.
Shea, Arthur D.	Sophomore	Jewett City, Conn.
Shea, John A.	Sophomore	Worcester, Mass.
Shea, Michael J.	Freshman	Springfield, Mass.
Shea, Paul B.	Freshman	Springfield, Mass.
Shea, Thomas H.	Sophomore	Worcester, Mass.
Shea, Timothy F.	Senior	Worcester, Mass.
Sheehan, Daniel J., Jr.	Freshman	Elmira, N. Y.
Sheehan, Edward J.	Sophomore	Worcester, Mass.
Sheehan, Edward S.	Freshman	Worcester, Mass.
Sheehan, Jeremiah J.	Freshman	Dorchester, Mass.
Sheehan, Jeremiah J.	Freshman	Worcester, Mass.
Sheehan, Jeremiah S.	Freshman	Worcester, Mass.
Sheehan, John D.	Senior	Worcester, Mass.
Sheehan, Shawn G.	Freshman	Brockton, Mass.
Shields, James I.	Senior	Chicago, Ill.

Shorten, John A.	Senior	Brooklyn, N. Y.
Silvia, Edward A.	Freshman	Fall River, Mass.
Silvia, Frank M., Jr.	Junior	Fall River, Mass.
Sims, Norman F.	Junior	Maynard, Mass.
Skoczylas, Walter J.	Sophomore	Trenton, N. J.
Slattery, James J.	Senior	Worcester, Mass.
Slifka, Adrian M.	Freshman	Youngstown, Ohio
Sloan, Joseph F.	Sophomore	Springfield, Mass.
Sloane, Harold M.	Senior	Hamden, Conn.
Smith, Colbert W.	Freshman	No. Adams, Mass.
Smith, Edward J.	Freshman	Springfield, Mass.
Smith, Frank B.	Freshman	Fitchburg, Mass.
Smith, Henry G.	Freshman	Worcester, Mass.
Smith, John R.	Senior	Binghamton, N. Y.
Smith, Joseph A.	Sophomore	Worcester, Mass.
Smith, Joseph F.	Freshman	Woburn, Mass.
Smith, Luke L.	Sophomore	New Bedford, Mass.
Smyth, Arthur J.	Sophomore	Brooklyn, N. Y.
Spain, John H.	Sophomore	Troy, N. Y.
Spring, Arthur J. M.	Sophomore	Worcester, Mass.
St. Arnaud, James A.	Junior	Fitchburg, Mass.
Stenger, Charles M.	Freshman	Ridgefield Park, N. J.
Stolle, Alois A.	Sophomore	White Plains, N. Y.
Sullivan, Edward F. K.	Senior	Philadelphia, Pa.
Sullivan, Eugene R.	Senior	Fall River, Mass.
Sullivan, Francis A.	Freshman	Chicopee Falls, Mass.
Sullivan, Francis J., Jr.	Junior	Brooklyn, N. Y.
Sullivan, George A., Jr.	Freshman	Milton, Mass.
Sullivan, George P.	Sophomore	Worcester, Mass.
Sullivan, Gerald J.	Senior	Worcester, Mass.
Sullivan, James D.	Junior	Springfield, Mass.
Sullivan, James D.	Sophomore	Bristol, R. I.
Sullivan, John J.	Freshman	Ramsey, N. J.
Sullivan, John P.	Freshman	Worcester, Mass.
Sullivan, John R.	Freshman	Waterbury, Conn.
Sullivan, Joseph A.	Freshman	Lowell, Mass.
Sullivan, Joseph F.	Sophomore	Hoboken, N. J.
Sullivan, Joseph W.	Sophomore	Binghamton, N. Y.
Sullivan, Norbert J.	Freshman	Baltimore, Md.
Sullivan, Robert J., Jr.	Senior	W. Hartford, Conn.
Sullivan, Walter F.	Sophomore	Worcester, Mass.
Sullivan, William J.	Senior	No. Grafton, Mass.
Sweeney, John J.	Sophomore	Worcester, Mass.
Sweeney, John J. M.	Sophomore	Worcester, Mass.
Sweeney, Eugene M.	Senior	Worcester, Mass.
Syseskey, Henry J.	Sophomore	Worcester, Mass.

Tamason, Anthony S.	Freshman	Athol, Mass.
Tangney, Robert A.	Sophomore	Worcester, Mass.
Taylor, Christopher J.	Sophomore	Brooklyn, N. Y.
Thompson, Ralph L.	Freshman	Somerville, Mass.
Tierney, Robert H.	Freshman	Woodhaven, L. I., N. Y.
Tierney, William J.	Freshman	Worcester, Mass.
Timon, John J.	Senior	Worcester, Mass.
Tivnan, Joseph R.	Freshman	Worcester, Mass.
Tobin, Robert T.	Sophomore	Portland, Me.
Toye, William A.	Sophomore	Lawrence, Mass.
Trainor, Joseph X.	Senior	Cambridge, Mass.
Trainor, Thomas F.	Sophomore	Cambridge, Mass.
Trottier, Daniel J.	Freshman	Adams, Mass.
Troy, William D.	Sophomore	Stamford, Conn.
Tucker, Joseph F.	Senior	Montclair, N. J.
Tutty, Raymond F.	Freshman	Chicopee, Mass.
Twomey, Thomas M.	Freshman	Jersey City, N. J.
Valicenti, Mitchell J.	Senior	So. Plainfield, N. J.
Verdon, Robert E.	Freshman	Hoboken, N. J.
Visk, Everist C.	Senior	Chicago, Ill.
Vogel, Francis H.	Junior	Winthrop, Mass.
Waldert, Leo W.	Senior	Rochester, N. Y.
Walker, John A.	Sophomore	Lowell, Mass.
Walker, William J.	Freshman	Brookfield, Mass.
Wallace, Thomas P.	Sophomore	Brooklyn, N. Y.
Walsh, Alfred A.	Freshman	Pittsburgh, Pa.
Walsh, Edmund B.	Junior	Worcester, Mass.
Walsh, Francis X.	Senior	New York, N. Y.
Walsh, Joseph A.	Freshman	Belle Harbor, L. I., N. Y.
Walsh, Thomas J.	Senior	Worcester, Mass.
Walsh, William A.	Sophomore	Pittsburgh, Pa.
Ward, Arthur P.	Junior	Fitchburg, Mass.
Ward, Bernard D.	Freshman	Fitchburg, Mass.
Ward, Charles W.	Senior	So. Norwalk, Conn.
Ward, Edmond H.	Freshman	Springfield, Mass.
Ward, John F.	Freshman	Brooklyn, N. Y.
Welch, John T.	Junior	Fall River, Mass.
Welch, Paul G.	Freshman	W. Hartford, Conn.
Weldon, Edward J.	Senior	New York, N. Y.
Wessell, George F.	Senior	Kenmore, N. Y.
Westhead, Andrew	Senior	Worcester, Mass.
Wheelock, Lewis M.	Freshman	No. Adams, Mass.
White, James J.	Senior	New York, N. Y.

Whiteford, Harry D.	Junior	Newark, Ohio
Whitfield, Robert D.	Junior	Albany, N. Y.
Williams, Thomas J.	Sophomore	Brockton, Mass.
Williamson, John F.	Freshman	Worcester, Mass.
Winsper, James G.	Senior	So. Dartmouth, Mass.
Wolanin, Alphonse S.	Sophomore	Worcester, Mass.
Wondolowski, Stanislaus G.	Sophomore	Worcester, Mass.
Wood, John B.	Sophomore	Pittsburgh, Pa.
Woods, Anthony S.	Freshman	Flushing, L. I., N. Y.
Woods, Donald H.	Sophomore	Brooklyn, N. Y.
Woods, William H.	Junior	Staten Island, N. Y.
Wynne, John W.	Sophomore	Manchester, Mass.
Xiques, Edward F.	Junior	Staten Island, N. Y.
Yakovonis, Casimer J.	Sophomore	Brockton, Mass.
Zarecki, Peter S.	Freshman	Lawrence, Mass.
Zeller, William C.	Sophomore	Defiance, Ohio

PHILOSOPHY COURSE

Adams, George S.	Senior	Worcester, Mass.
Alzerini, Alfred W.	Senior	Milford, Mass.
Ambrose, Joseph G.	Freshman	Mt. Carmel, Pa.
Anderson, Edwin J.	Sophomore	Bangor, Me.
Baker, Henry J.	Junior	Southboro, Mass.
Baril, Arthur C.	Junior	Spencer, Mass.
Barry, Louis J.	Sophomore	Newport, R. I.
Baxter, Frederick G.	Sophomore	Worcester, Mass.
Bell, Robert A.	Sophomore	Bangor, Me.
Bennett, Edward J.	Freshman	Hartford, Conn.
Bergen, Edward J.	Junior	Somerville, Mass.
Bergstrom, Francis A.	Freshman	Worcester, Mass.
Blaum, Francis A.	Sophomore	Wilkes-Barre, Pa.
Boyle, Charles W.	Junior	Worcester, Mass.
Brady, William R.	Freshman	Lowell, Mass.
Broderick, Maurice A.	Junior	Manchester, N. H.
Burns, Bernard J.	Junior	Lowell, Mass.
Burns, James D.	Junior	Lowell, Mass.
Byrne, Patrick J.	Junior	Washington, D. C.
Caldbeck, Matthew J.	Freshman	St. Johnsbury, Vt.
Callahan, John L.	Sophomore	Malden, Mass.
Cammarano, Frank P.	Freshman	New Haven, Conn.

Carnicelli, Thomas J.	Senior	Winthrop, Mass.
Carnicelli, William J.	Freshman	Winthrop, Mass.
Carroll, George L.	Sophomore	Worcester, Mass.
Casey, James N.	Freshman	Norwich, Conn.
Casey, John T.	Freshman	Milford, Conn.
Cavalieri, James A.	Sophomore	East Boston, Mass.
Clark, Edward F.	Junior	Roslindale, Mass.
Clayborne, Thomas E.	Sophomore	Worcester, Mass.
Clifford, Walter F.	Freshman	Roslindale, Mass.
Coakley, William J.	Freshman	Augusta, Me.
Colucci, Anthony, Jr.	Sophomore	Woburn, Mass.
Connolly, James J.	Senior	Salem, Mass.
Connolly, John P.	Junior	Jamaica Plain, Mass.
Corrigan, George W.	Freshman	New Haven, Conn.
Costich, Kenneth J.	Sophomore	Rochester, N. Y.
Coughlin, Raymond T.	Sophomore	Hoboken, N. J.
Cavedi, Alfred P.	Junior	Worcester, Mass.
Crombie, George D.	Junior	Thompsonville, Conn.
Cronin, Jeremiah J.	Junior	Worcester, Mass.
Crowley, Charles J.	Sophomore	Brighton, Mass.
Curley, John M.	Junior	Portland, Me.
Curran, James J.	Freshman	Lynn, Mass.
Daly, John L.	Sophomore	Warehouse Point, Conn.
D'Argenis, David C.	Junior	Worcester, Mass.
Depro, Louis F.	Freshman	Chevy Chase, Md.
Desautels, Eugene A.	Senior	Quinebaug, Conn.
Dinnean, John J.	Junior	New Haven, Conn.
Doherty, Charles H.	Sophomore	Chicopee, Mass.
Donahue, J. Joseph	Freshman	Arlington, Mass.
Donahue, Joseph J.	Freshman	Worcester, Mass.
Donovan, Edward J.	Sophomore	Newport, R. I.
Donovan, Robert P.	Freshman	Natick, Mass.
Donovan, Thomas L.	Sophomore	Auburndale, Mass.
Doyle, Henry A.	Sophomore	Worcester, Mass.
Driscoll, Charles E.	Sophomore	Whitinsville, Mass.
Drottar, Stephen J.	Freshman	Chisholm, Me.
Dunphy, Edwin P.	Sophomore	Northampton, Mass.
Elwood, David M.	Junior	Dalton, Mass.
Emling, Jerome	Freshman	Eric, Pa.
Farrell, James J.	Junior	Washington, D. C.
Farrell, Thomas F., Jr.	Senior	Wilkes-Barre, Pa.
Favulli, Michael J.	Freshman	Worcester, Mass.

Fay, Joseph J.	Sophomore	Rockport, Mass.
Finn, Edward L., Jr.	Sophomore	Northampton, Mass.
Fisher, Andrew P.	Senior	New York, N. Y.
Fitzgerald, Donald H.	Junior	Southbridge, Mass.
Flanagan, Edward F.	Junior	Lowell, Mass.
Flanagan, James E.	Freshman	Portland, Me.
Fraser, Clarence K.	Junior	Somerville, Mass.
Friederich, Robert G.	Junior	Cincinnati, Ohio
Galkowski, Joseph S.	Sophomore	Worcester, Mass.
Gannon, Edward M.	Senior	Syracuse, N. Y.
Garrity, Frank J.	Junior	Boston, Mass.
Gately, Alphonsus P.	Senior	Rockville Cen., L. I., N. Y.
Glendon, William J.	Freshman	Dalton, Mass.
Goonan, Thomas J.	Junior	Manchester, N. H.
Griffin, Leslie B.	Sophomore	So. Weymouth, Mass.
Grigaitis, Joseph J.	Sophomore	Worcester, Mass.
Gutierrez, Victor M.	Senior	Santurce, P. R.
Hackett, Thomas A.	Sophomore	Worcester, Mass.
Hally, James T.	Sophomore	Detroit, Mich.
Hanley, Raymond J.	Freshman	Louisville, Ky.
Harrington, Joseph R.	Senior	Arlington, Mass.
Hassett, J. Frank	Senior	Worcester, Mass.
Havens, George F.	Junior	Hartford, Conn.
Hay, William	Freshman	Fitchburg, Mass.
Hayes, Francis C.	Freshman	E. Brookfield, Mass.
Healy, Richard J.	Freshman	New Haven, Conn.
Hebert, Eugene H.	Senior	Westbrook, Me.
Henault, Norman L.	Freshman	Sterling, Mass.
Hennebry, James C.	Freshman	Framingham, Mass.
Hickey, John E.	Sophomore	Worcester, Mass.
Himmelberg, Theodore J.	Junior	Washington, D. C.
Hobart, Leon J.	Senior	Hitchcock, S. D.
Hurley, Charles	Senior	Portsmouth, N. H.
Jarvis, Lloyd A.	Sophomore	Jewett City, Conn.
Kane, Thomas F. Q.	Senior	Hartford, Conn.
Kearns, Thomas P., Jr.	Freshman	Meriden, Conn.
Keating, E. Rowland	Freshman	Pittsburgh, Pa.
Kennedy, Frank J.	Freshman	Goffe's Falls, N. H.
Kennedy, Robert J.	Freshman	Hartford, Conn.
Kerrigan, William J.	Senior	Fall River, Mass.
Kershalla, Joseph D.	Freshman	E. Plymouth, Pa.
Klarman, Walter J.	Sophomore	New Haven, Conn.

Klumbach, Harold F.	Senior	New York, N. Y.
Kucharski, Theodore M.	Senior	Exeter, N. H.
LaSalle, Charles J.	Freshman	Valley Falls, R. I.
Lawrence, Henry U.	Senior	Montague, Mass.
Leach, Martin D.	Freshman	Brookfield, Mass.
Leary, Edwin A.	Senior	Arlington, Mass.
Lepore, Albert J.	Freshman	Worcester, Mass.
Lynch, John C., Jr.	Sophomore	Milford, Mass.
Maas, Richard G.	Senior	Milwaukee, Wis.
MacDonnell, Arthur J.	Sophomore	So. Boston, Mass.
Macek, James J.	Junior	Manchester, N. H.
Macken, Luke J.	Junior	Pittsfield, Mass.
MacLaughlin, John J.	Sophomore	Lowell, Mass.
Madden, William F., Jr.	Junior	Waltham, Mass.
Madden, William J.	Senior	Brockton, Mass.
Maffeo, Alfred A.	Senior	Fitchburg, Mass.
Maguire, Paul J.	Senior	Somerville, Mass.
Mahoney, John S.	Senior	Greenfield, Mass.
Malboeuf, Leo W.	Sophomore	Worcester, Mass.
Manfreda, Anthony R.	Senior	Rutland, Vt.
Mantelli, Elmo P.	Freshman	So. Manchester, Conn.
Marcello, Ralph T.	Sophomore	New Haven, Conn.
Marshall, John J.	Sophomore	Dorchester, Mass.
Maynard, Dona G.	Freshman	Pawtucket, R. I.
Meegan, Joseph R.	Junior	Brookline, Mass.
Miller, William G.	Senior	Fitchburg, Mass.
Moran, Thomas W.	Senior	Springfield, Mass.
Morin, George A.	Junior	Spencer, Mass.
Murphy, David J.	Senior	Marlboro, Mass.
Murphy, Thomas F.	Freshman	Worcester, Mass.
Murphy, Thomas J.	Junior	Worcester, Mass.
McCool, John F.	Junior	Bethlehem, Penna.
McLaughlin, Francis E.	Senior	Saco, Maine
McNally, Thomas F.	Freshman	Clinton, Mass.
Nolan, James J.	Freshman	Boston, Mass.
Nolan, William R.	Sophomore	Roxbury, Mass.
O'Brien, John D.	Junior	Rochester, N. Y.
O'Connell, Edward A.	Junior	New York, N. Y.
O'Connell, Philip E.	Sophomore	Brockton, Mass.
O'Donnell, Edward K.	Senior	Salem, Mass.
O'Reilly, Vincent P.	Senior	Worcester, Mass.

Perry, Thomas F.	Junior	Bangor, Maine
Peterson, Powers H.	Freshman	Caribou, Maine
Powers, Frank H., Jr.	Freshman	Jamaica, L. I., N. Y.
Pyne, George F.	Junior	Milford, Mass.
Quine, Francis J.	Freshman	Akron, Ohio
Reidy, Joseph M.	Junior	Worcester, Mass.
Richer, Raymond C.	Freshman	Marlboro, Mass.
Rigney, William S.	Freshman	Lafayette, R. I.
Riley, Robert B.	Freshman	Marlboro, Mass.
Riley, Thomas F.	Freshman	Worcester, Mass.
Riley, William J.	Sophomore	Warren, Mass.
Rovinski, Anthony C.	Freshman	Kingston, Penna.
Russell, Edwin N.	Junior	New York, N. Y.
Ryan, James J.	Freshman	Brookline, Mass.
Saunders, Thomas J.	Freshman	Lowell, Mass.
Savage, John J.	Sophomore	Worcester, Mass.
Scavullo, Blaise F.	Freshman	Brooklyn, N. Y.
Serbent, Stephen A.	Junior	New York, N. Y.
Shevlin, James C.	Senior	Cincinnati, Ohio
Sichol, Adam B.	Junior	Southbridge, Mass.
Smith, Samuel D.	Sophomore	Worcester, Mass.
Stokes, William J.	Sophomore	Naugatuck, Conn.
Sullivan, Cornelius J.	Junior	Providence, R. I.
Sullivan, Frederick J.	Freshman	Worcester, Mass.
Sullivan, William J.	Freshman	Worcester, Mass.
Sweeney, Patrick M.	Senior	Providence, R. I.
Sweeney, William F.	Senior	Plattsburg, N. Y.
Tierney, Edmund F.	Sophomore	Worcester, Mass.
Tierney, Matthew R.	Senior	New Haven, Conn.
Tomasi, Lawrence J.	Freshman	Barre, Vt.
Tracy, Paul B.	Junior	Bristol, Conn.
Tranfaglia, Henry L.	Sophomore	Revere, Mass.
Watrous, Richard F.	Senior	Brooklyn, N. Y.
Weiss, Stanley E.	Junior	Syracuse, N. Y.
White, Francis J.	Junior	Worcester, Mass.
Winslow, Gordon W.	Freshman	Pomfret, Conn.

SCIENCE COURSE

Barousse, J. Carlos	Sophomore	Mexico City, Mexico
Bedoski, Anthony J.	Freshman	Larksville, Penna.
Beierschmitt, Charles B.	Freshman	Mt. Carmel, Pa.

Besselman, Wayne L.	Junior	E. Braintree, Mass.
Brennan, James E.	Freshman	Sackett Harbor, N. Y.
Carey Thomas B.	Freshman	West Hartford, Conn.
Chenis, John K.	Senior	Worcester, Mass.
Christensen, Thomas A.	Junior	Newport, R. I.
Clifford, Christopher J.	Sophomore	Brockton, Mass.
Connolly, Richard F.	Junior	Salem, Mass.
Connor, James J.	Junior	Worcester, Mass.
Corbett, Joseph B.	Freshman	Madison, N. J.
Crowe, Robert S.	Junior	Unionville, Conn.
Davet, George D.	Freshman	Painesville, Ohio
Dolan, Arthur T.	Sophomore	Leominster, Mass.
Donoghue, Florence F.	Senior	Worcester, Mass.
Ferguson, Richard F.	Freshman	Mahanoy City, Penna.
Finn, Joseph L.	Junior	Wilkes-Barre, Penna.
Fisher, George G.	Freshman	Huntington, N. Y.
Flaherty, James L.	Freshman	Norfolk, Va.
Goett, Harry J.	Junior	New York, N. Y.
Goett, John E.	Freshman	St. Albans, N. Y.
Gonzalez, Salvador A.	Sophomore	Miramar, P. R.
Goyette, Cyril A.	Sophomore	Mystic, Conn.
Granelli, Bryan F.	Sophomore	Hoboken, N. J.
Halloran, John B.	Senior	New Bedford, Mass.
Harleman, John A.	Freshman	Springfield, Mass.
Haulman, George M., Jr.	Freshman	Fitchburg, Mass.
Healy, Lawrence C.	Freshman	Rome, N. Y.
Keating, Joseph E.	Freshman	Gorham, Maine
Kendrtarvich, John A.	Senior	Worcester, Mass.
Kirchner, William J.	Senior	Lanesboro, Mass.
Mackell, Harry J.	Senior	Philadelphia, Penna.
MacNeil, James G.	Freshman	New York, N. Y.
Mallett, Edward J.	Freshman	Worcester, Mass.
Moffitt, William P., Jr.	Sophomore	Wilkes-Barre, Penna.
Molteni, Howard F.	Freshman	Weehawken, N. J.
Monahan, John T.	Sophomore	Worcester, Mass.
Moylan, Francis J.	Junior	Milton, Mass.
McGoey, Charles J.	Freshman	Woodmere, L. I., N. Y.
O'Dea, Joseph R.	Freshman	Springfield, Mass.

Petrossi, John J.	Sophomore	Rochester, N. Y.
Proulx, Henry W.	Freshman	Worcester, Mass.
Sanchez, Louis T.	Junior	Condado, Porto Rico
Schneck, Raymond A.	Freshman	Jackson Heights, N. Y.
Sharples, Charles S.	Freshman	Auburn, N. Y.
Skehan, Charles J.	Sophomore	Gardiner, Maine
Sliney, James G.	Junior	Brookline, Mass.
Stankard, Martin F., Jr.	Junior	Waltham, Mass.
Stevens, John M.	Junior	Framingham, Mass.
Sullivan, Edmund B.	Sophomore	Worcester, Mass.
Sullivan, John A.	Sophomore	Jersey City, N. J.
Sulya, Louis L.	Sophomore	Monmouth, Maine
Twomey, Thomas M.	Freshman	Jersey City, N. J.
Varela, Frank G.	Sophomore	Tenafly, N. J.
Walsh, James B.	Freshman	Hudson, Mass.
Weldon, Maur J.	Sophomore	New Haven, Conn.
Wondolowski, Joseph P.	Senior	Worcester, Mass.
Zyntell, Ignatius J.	Freshman	Dorchester, Mass.